PLAGUE, FEAR, *and POLITICS* IN SAN FRANCISCO'S CHINATOWN

*** GUENTER B. RISSE ***

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Guenter B. Risse

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The past is never dead. It's not even past.

—WILLIAM FAULKNER

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At last, friends and family appear relieved that the long "ordeal" is over, providing more time for travel and relaxation. I wish to acknowledge their patience and steady support, and dedicate this book to the memory of all Chinatown residents who in the early 1900s became victims of an implacable killer.

Plague, Fear, and Politics in San Francisco's Chinatown

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Introduction

> Living in America, we overseas Chinese are far from our homeland. We will omit nothing about events in China, but must be particularly attentive to American news because living among foreigners, our readers need to know what to follow or avoid, especially regulations directed against us that are becoming ever more inflexible.
>
> —DENG YIYUN, *CHUNG SAI YAT PO* (*CHINESE WESTERN DAILY*), INAUGURAL EDITORIAL (FEBRUARY 14, 1900).

Located at the intersection of powerful American ideologies—race and xenophobia, dread of disease,[1] and modern sanitation—this study seeks to enhance our understanding of a singular episode in American public health history: the appearance and management of bubonic plague in San Francisco's Chinatown between 1900 and 1905. Following the California gold rush of 1849, Chinatown was repeatedly condemned for its filth and bad smells, which were believed to breed disease. For more than half a century, such discourse, heavily tinged with racial prejudice and amplified by a sensational print media, found widespread acceptance. Playing on public anxiety regarding contagion, the periodic rants not only dehumanized an entire population but also motivated local authorities to employ muscular strategies of social isolation, control, and removal. Sanitary representations and the employment of stereotypes came to underpin political, economic, and cultural considerations designed to negatively portray Chinese in California, becoming a potent and permanent component of anti-Asian prejudice.[2]

Historical revisionism is an ongoing enterprise.[3] Influenced by current events, we continue to seek new frames and explanations for past stories, inquiring after

better insights and understanding. History is periodically updated and remodeled, its meaning refurbished as new sources and sensibilities suggest a fresh interpretation.[4] Specific case studies contribute to a better understanding of the multiple forces shaping medicine, science, and public health. Individual epidemic episodes examined in their fullest context capture the construction and contested nature of policy and intervention. All politics are contingent and local, but their complex interplay also reveals some universal values and behavior with potential for application to contemporary issues and problems.

Much has already been written about San Francisco's Chinatown plague of 1900 to 1905. This study seeks to expand the analysis by placing events into a broader transnational frame that allows for greater attention to the dynamics of the cultural and material transition from the original to the host society. Transnational history is particularly apt in the examination of immigration to America and especially valuable for local studies.[5] Indeed, historians have come to depict Chinatown as a "community of fate,"[6] a "trans-Pacific" society,[7] or a "transnational ghetto,"[8] with a set of values and relationships that bound its population not only to their motherland, China, but also to America.[9] Instead of being detached "sojourners,"[10] Chinatown residents eagerly engaged on multiple levels with their new world, fighting for their legal rights and managing a potentially lethal plague epidemic.

Gone is the celebratory historiography focused on national narcissism and progressive scientific achievements. Such studies neglected to describe fully the contested nature of public health policies and interventions, and they failed to portray the complex interplay of factors responsible for the often bizarre events that unfolded following the appearance of plague. Fueled by fearmongering, public health responses can be intrusive and controlling, as well as stigmatizing, exclusionary, and, above all, arbitrary.[11] They can also be powerful tools for revealing and solidifying biases of class and race.

Public health was born from concerns with social order and trade, both of which are threatened by the spread of epidemic disease. Like other human emergencies, disease outbreaks can expose coping mechanisms at the local, regional, and national levels. Panic, flight, and economic ruin demanded rapid, robust, and even radical measures, which were achieved through the employment of police and military forces. The sanitary inspections into Chinatown were punitive invasions designed to coerce a recalcitrant population into submitting to recent canons of western hygiene and domesticity promoted by a more affluent class of Americans. To this day, public health remains messy, forced to engage with mul-

tiple interests and the manifold values—with all their limitations and contradictions—deeply imbedded in the daily lives of people.

Given public health's early martial character, a play on the often-quoted phrase from Carl von Clausewitz, the famous Prussian military theorist and strategist, that "war is simply an expression of politics by other means" is not inappropriate. The original dictum, published in Clausewitz's *On War* (1832), expressed the notion that large-scale conflict assumed the character of a duel or wrestling match, a comprehensive clash of forces involving emotion, chance, and rational calculation. Clausewitz insisted that the past be accepted on its own terms and encouraged historians to penetrate the mindsets and attitudes of all combatants. He preached reliance on in-depth examinations of particular military campaigns rather than broad-brush sketches. This insistence on depth rather than breadth was, of course, difficult to achieve in practice, and the uniqueness of every historical example discouraged efforts to generalize and derive broader lessons from events and problems from different eras and places. Still, employing such a historical framework provides important guideposts for public health history, pointing out the need for detailed local studies.[12] Following in Clausewitz's footsteps, this revised narrative is structured as a dueling match, presented chronologically, and divided into discrete rounds.

Focused on the dynamics of change, Clausewitz's model can be profitably applied to the topic at hand: like war, which it often mimics with its shifting strategies and robust interventions, public health can also be conceptualized as a political struggle. In early-twentieth-century America, public health functioned as a prominent tool of empire, concerned with the dangers posed by potential invasions of exotic and lethal diseases. Despite lofty goals of national protection from disease, public health practices were never benign. They inevitably became enmeshed in cultural biases and political agendas, financial interests, and commercial aims. To fully appreciate scope and impact, a true history of public health must delve into all societal aspects affected by its actions. At the center of this local study, geography (Chinatown) and its environment (unsanitary) created a web of ideological and circumstantial factors that guided all health campaigns designed to conquer plague.

Since the gold rush, San Francisco's leaders had used the specter of contagion spreading from Chinatown as a strategy to segregate and eventually expel its residents. This scheme first involved fears of recurrent cholera outbreaks, followed by outbreaks of smallpox, syphilis, and leprosy. After announcing the presence of plague in March 1900, city authorities moved aggressively against

the Chinese district, making little effort to respect Chinese cultural sensitivities. Instead, the sanitary leadership displayed a predilection for tough talk, threats of social dislocation, and aggressive, even vindictive and destructive, measures designed to generate "contagious anxieties" and thus achieve Chinese compliance.[13] In response, Chinatown's stoic and ever-distrustful residents mounted a vigorous campaign to defend their civic rights and ensure their economic survival, overturning blanket quarantine laws and resisting forceful removal.

Based on folk taxonomies, Asian racism traces its deep roots to Europe. To explain human diversity and claim self-identity, even superiority over the "other," the ancients made ethnocentric distinctions linking physical characteristics and behavior to location and climate.[14] Later, the medieval concept of a hierarchically arranged *scala naturae*, or chain of being, ranging from a perfect Christian God to the lowest speck of dirt, gained popularity.[15] This notion placed some human groups—children, paupers, laborers, and idiots—close to brute primates. Faced with greater human diversity and inequality during the era of global exploration and early colonization, Europeans sought to elaborate on the biblical notion of a single family tree. François Bernier, a seventeenth-century French physician-traveler characterized people from East Asia as flat faced, with short noses, little and deep-set pig eyes, and thin beards.[16]

During the Scientific Revolution, naturalists such as Carl Linnaeus in Sweden pursued a comprehensive inventory of the world through a classification of plants, animals, and people. A geographical and biological determinist, he selected the four known continents as habitats for distinct human populations or "races" (an English translation from the Spanish term *raza*, from the Latin *ratio*, meaning "species" or "stock"). These categories were based on biological, behavioral, and cultural information. Commingling physical features with behavioral traits, Linnaeus's *Homo Asiaticus* was profiled as a person with black hair and dark eyes, displaying a yellowish, sallow complexion, and endowed with a melancholic temperament.[17]

Building on Linnaeus's work, the German physician and anatomist Johann F. Blumenbach proposed in 1795 a new "scientific" racial system based on speculative physiology and an extensive collection of skulls.[18] Employing physical characteristics such as cranial measurements and skin color, the scheme featured five major species of humanity: Caucasian (white), Mongolian (olive yellow), Ethiopian (black), Malay (tawny brown), and American Indian (copper red). The terms *Caucasian* and *Mongolian* both were borrowed from a colleague of

Blumenbach;[19] the former designated white people from the northern Caucasus region (today's Chechnya), presumed to be near the biblical landing of Noah's Ark.[20] Caucasians represented the very archetype of God's original creation: beautiful and "not stained with pigment."[21]

As a foil for the perfect white Caucasians, Blumenbach adopted a new racial category—Mongolian—a designation that sought to lump all ethnic Asian populations. The label harked back to images of invading barbarian hordes under the ruthless leadership of Genghis Khan, which caused death and destruction in Eastern Europe during the thirteenth century. Coarse and filthy, Mongolians were ugly people, endowed with square, flat faces, narrow eyelids, and scanty hair.

Blumenbach's notion that all "colored" races suffered structural variations that affected human size, vitality, and strength because they diverged or "degenerated" from the ideal Caucasian template set the stage for subsequent anatomical distinctions and degrading racial stereotypes.[22] Instead of climate and culture, presumed racial characteristics were deemed biological, "hereditary, permanent and unalterable."[23] Comparative anatomical studies of skull shape and facial angle suggested to racial scientists that Chinese possessed diminished intellect and moral character.[24] A comparison with Caucasian and chimpanzee brains claimed to demonstrate some unfavorable Chinese ratios regarding size and weight.[25] The diminished cranial capacity explained the inability to adopt Western ideas, Christian religion, mechanical arts, and sciences.[26] Moreover, the typical Mongolian eye fold was pathologized: the slanted eyelids were associated with shifty, unscrupulous behavior. The pale yellow skin color assigned to Asians reflected indolence, even unwellness, jaundice and potential foulness.[27] By the 1850s, French and German psychiatrists came to emphasize the dangers of hereditary mental degeneration for the future of humankind, leading to new dread of interracial contacts and degraded offspring.[28]

Advanced material and social organization—notably science and technology—made Caucasians "civilized" while all "colored" people were collectively degraded as "savages," especially black Africans involved in the burgeoning slave trade. Race remained a potent social and cultural construction in search of scientific validation. With help from subsequent anthropological studies, physical racial characteristics were effectively linked to inferences regarding personality traits and behavior. Asians were deemed dishonest and depraved in spirit and manner.[29] Such racial categories became particularly relevant in Britain and its former colonies, including the United States, as these countries sought to

consolidate political power, establish social hierarchies, and create systems of economic exploitation.[30]

When Chinese migrants came to America's West Coast following the gold rush, they were greeted with condescension and aversion. The experience of diplomats, missionaries, and travelers to China suggested that "Mongolians" were "barbarians," primitive humans often behaving like their subhuman animal cousins.[31] Race-making in San Francisco was equally shaped by local political, social, and economic circumstances. In California, the Mongolian race category became a legal designation, allowing for discriminatory legislation. Depicted through popular stereotypes, Chinese with their queues (hair braids) and distinctive clothing were routinely portrayed as "little brown men" or "urchins." Local writers commented on their effeminate, childlike appearance: the "flat" and "dull" faces with "slanting fishlike eyes" narrowed by "Mongolian eye folds."[32] Some followed the degeneration model by describing a Chinese person as a "queer little specimen of petrified progress with a natural propensity for conflict, violence, crime and prostitution."[33] An apparent greater tolerance for pain prompted notions of arrested development of their nervous systems. Californians eagerly adopted the racialized conception of a "yellow peril"—a phrase coined in late-nineteenth-century—to categorize the threat Asian peoples posed to European-American civilization. This notion suggested another invasion of "heathen" Mongol migrants, who would debilitate labor and social relations even as they adhered to their traditional "barbarian" traits. Among the most feared aspects of this assault was the potential importation of dangerous diseases endemic to the Asian continent. When Congress passed its first Chinese Exclusion Law in 1882, such racial arguments remained at the forefront of the justifications for the legislation: "Mongolians are alien to our civilization, aliens in blood, aliens in faith . . . they are a degraded people."[34] Ironically, such peculiarities were waived for upper-class mandarins involved in international trade.[35]

Residential segregation constitutes another visible expression of racism. Among the hitherto neglected contexts in the evolution of San Francisco's Chinatown was its importance as real estate commodity. In America, and especially the West, land ownership was the most lucrative form of investment. In San Francisco, even before the gold rush, the public sale of lots was more profitable than gold mining.[36] High-stakes ventures and deals led to speculation and corruption reaching into the highest levels of municipal and state government. Deprived by state law of land ownership, most Chinese remained dependent for their lodg-

ings on a cadre of well-connected white "capitalists" intent on reaping maximum profit. With the help of agents, these absent and predatory landlords were largely responsible for Chinatown's derelict appearance, density, and unsanitary conditions that drew the ire of local authorities. As the city expanded, this ghetto came to be wedged between affluent neighborhoods and the central business district, making the location increasingly attractive for land speculators and developers. Forced to traverse Chinatown, annoyed cable car passengers were daily reminded of its dilapidated condition. Plans to evict the Chinese with the help of pliant local, state, and federal authorities started soon after the gold rush. Diseases such as leprosy and plague in Chinatown became potent factors in kindling anti-Chinese sentiment and the push for wholesale demolition of the area. Although prevented by law, the ultimate goal was to strangle the social and economic viability of Chinatown and force remaining residents to abandon their ethnic ghetto, opening the quarter for new white residential and commercial use.

Our modern sanitary paradigm arose as European health conditions visibly deteriorated at the dawn of the Industrial Revolution. Indeed, by the early nineteenth century, urban residents lived in highly degraded environments characterized by air pollution, rapid population growth, inadequate housing, poor nutrition, and strenuous factory life. Such circumstances posed health risks, seriously threatening the productivity of workers employed in manufacturing and commerce. In Britain, vital statistics assessing urban salubrity concluded that industry-related squalor bred short-lived, physically feeble, less productive, and morally corrupt workers. These people were particularly susceptible to contagious diseases. The economic impact for the nation was substantial: sickness and early deaths of breadwinners severely affected the welfare of large families. In cities such as London and Paris, maps revealed so-called fever nests scattered among the poorest neighborhoods; they were considered tinderboxes for epidemics.[37] When the second Asiatic cholera pandemic reached Europe in the early 1830s, those most commonly infected were among such marginalized populations. The unfamiliarity of this dramatic disease and its rapid and often fatal symptoms led to the implementation of traditional measures such as quarantines and the elimination of stagnant water and accumulated organic filth.[38] Such actions acquired a new designation: they were called health-promoting or "sanitary" from the Latin word *sanitas*.

This progressive burden of disease forced Britain to increase expenditures for its traditional welfare system—poor relief—supported by local ratepayers.

Higher taxes demanded urgent attention. An 1842 report exposed the effects of poverty on human health due to overcrowding, deficient diet, lack of clean water, and inadequate waste disposal.[39] Written by Edwin Chadwick, secretary to the Poor Law Commission, this landmark document spelled out what became known as the "sanitary idea," a pragmatic program for the protection of the laboring population and welfare taxpayers.[40] With the help of physicians, epidemiologists, and statisticians, Chadwick's plan was specifically designed to devise measures for neutralizing the traditional linkages between disease and "atmospheric impurity."

The classic concept of *miasma* (Greek for pollution or polluting agent) was based on the idea that many diseases originated from smelly, poisonous vapors steaming from the decay and putrefaction of animal and human corpses, excreta, spoiled foodstuffs, and stagnant marshes.[41] Like miasma, contagion and infection—two other ancient and ambiguous concepts—explained the presence of invisible agents transmitting impurities and poisons through close contact with affected humans and their possessions.[42] Although the nature and qualities of these principles remained obscure and their materiality debatable, their effects were unambiguous: they often proved harmful and even deadly.[43]

Chadwick believed that decomposing matter gave off poisonous sewer gas, suggesting that the key task of the new sanitation was to concentrate on the cleansing and removal of garbage and human waste. Feces and their potential for transmitting disease made existing outhouses and cesspools hazardous. Events in London during the 1849 cholera epidemic, especially John Snow's investigations concerning the city's contaminated water supply, highlighted the importance of building networks of subterranean pipes carrying, like human bowels, the decaying waste of an entire city toward a watery exit.[44]

The sanitary legislation favored the demolition of slums, considered primary sources of epidemics.[45] According to the precepts of the emerging sanitary science, high-density housing needed to be razed to secure improved ventilation, fresh air, and sunlight. In Britain, a new legal framework was put into place—a central General Board of Health—to guide local boards responsible for sanitary supervision, inspection, and cleaning operations. Given the urgency of this work, Chadwick recommended the involvement of qualified civic engineers. Implementation was key. Police were called to enforce new sanitary laws, including the removal of "nuisances"—garbage, other environmental filth, even buildings deemed unfit for human habitation. While such public health activi-

ties, especially the plumbing, were expensive, sanitarians warned that human and economic costs of disease would be even greater.[46]

Not surprisingly, Chadwick's notion of cleanliness acquired wider meanings in response to social and cultural circumstances. Victorians came to believe that industrial squalor and flimsy housing influenced people's lifestyle and conduct, leading to intemperance, immorality, crime, and degeneracy.[47] The specter of proletarian unrest prodded an anxious middle class into action. Reformers promoting the new sanitary gospel spoke of battling "physical and moral bad air."[48] They focused on environmental purification—natural disinfectants such as sunlight and air—and demanded a radical transformation of daily human life. Judged on the basis of Chadwickian sanitation, only a clean and odor-free society could be deemed healthy.[49] Guided by sanitary ideology, sensory experiences led to the formation of late-nineteenth-century "smellscapes" within the crumbling and reeking urban ghettos of Europe and America.[50] Health officials ordered graveyards, tanneries, refuse dumps, and cesspools to be removed from city centers. The escalating production of malodorous human waste and refuse generated strong emotions. Tough language about "dirt and vermin" became emblematic in this quest to reconstruct humanity. Code words such as *filth* and *stink* were meant to stir up disgust, a powerful emotion that would demonize and isolate the undesirable "other" living in a polluted material world. This was particularly true in large cities such as London and Paris. Marginalized slum dwellers, immigrants, and those considered racially inferior, and by extension, immoral, were blamed for their poverty, vice, and disease.[51]

Revisions—this one included—rest on the shoulders of previous scholars who furnished evidence and insights while raising important questions.[52] In the historiography of sick Chinese immigrants, however, some writers have paid scant attention to Chinese sources.[53] Moreover, for gauging the reaction to the plague outbreak, the traditional cultural underpinnings of Asian "otherness" must be explored and included. Racist stereotypes were essential in shaping the public health response in San Francisco.[54] Misinterpretations of China's lengthy and rich past, beliefs, and the behavior of its people contributed to these stereotypes. Westerners and Asians experience the world very differently. Indeed, culture influences perception and induces particular modes of reasoning. Recent experiments in social and cultural psychology suggest that members of different societies often differ dramatically in their experiential

and cognitive processes, metaphysics, and social norms and structure.[55] Without a better understanding of the epistemological dissonance between traditional China and the sanitizing West, this story would simply end up as another example of positivist public health history: a victory of science over old "superstitions" embedded in Chinese cosmology and culture preventing a shift toward modernity.[56]

The people arriving from southeast China came from an ancient agricultural, rice-farming society where survival required cooperative efforts for cultivating and irrigating the land. Daily life demanded attention and perception of goals espoused by groups: families, clans, or associations. Social harmony was key to success, requiring individual skills of self-control and sacrifice, sharing, and responsibility. Living in such an interdependent world, each member of the community was taught to feel comfortable operating within established hierarchical systems of elders and government officials determined to preserve cosmic harmony and promote material prosperity. Together, they all faced a universe conceived as a mirror image of their own earthly life: a complex, interconnected, and contradictory whole operating in recurrent patterns and perpetually seeking balance. Populated by gods, humans, and departed spirits, this cosmos defied easy categorization and explanation.[57]

Employing dialectical instead of analytical reasoning, the Chinese attempted to understand this dynamic, interactive universe in its totality instead of in its parts. Living in such an interdependent world, people perceived and explained everyday events holistically, in contrast to Western uses of logic, analysis, and classification. In an unpredictable world of oppositions and paradoxes, causality was ambiguous, inferences subjective and unique. Within this type of conception, the plague outbreak in Chinatown came to represent another example of disharmony. Collective actions, including the manipulation of supernatural forces and efforts to restrain evil ghosts, were in order. At stake was the survival of a beleaguered population.

Most historical reconstructions, analyses, and interpretations of the San Francisco plague have relied on documentation obtained from official municipal, state, and national authorities, supplemented by sensationalized accounts presented in racist local newspapers. By contrast, the current work aims to combine the standard Western documentation with Chinese-language sources. Language reflects divergent cultural paradigms and serves as an invaluable vehicle for representing a social system. Chinese publications allow us to recover a tapestry of beliefs and relationships that emerge through selected

voices of a marginalized ethnic group. Detecting fundamental differences in interpretation between English and Chinese language sources casts a new light on this epidemic.

Unfortunately, Chinese primary sources are fragmentary. Most immigrants believed that their personal stories were useless and refused to share them with relatives. Part of this reticence derived from their collective mentality: all achievements were attributed to group action. Moreover, the 1906 earthquake and fire completely destroyed Chinatown, including most private and official documentation. This study therefore relies, instead, on the daily newspaper, the *Chung Sai Yat Po* (*Chinese Western Daily*), for the reconstruction of life during the plague years. Its editor, Ng Poon Chew, was a Cantonese immigrant who became a Presbyterian minister before entering the business of journalism. As a newspaper publisher, Ng became a prominent voice in the community, and he often used his editorial position to argue against political apathy and introduce his readers to San Francisco's contemporary politics and culture. His publication, which included daily articles and a large section of advertisements, helped shift Chinatown's inward focus to the life and politics in the host city of San Francisco. His agenda was particularly relevant during the bubonic plague outbreak. Ng wrote about the first Chinatown quarantine: "Bad omens appeared. The situation was volatile. Everybody felt insecure. People acted uneasily as if sitting on thorns. Everyone, inside and outside, used our paper as their ears and eyes. We became famous instantly."[58] Within a Cantonese discourse that stressed social community over individualism, Ng attempted to break ethnocentric barriers and encouraged the Chinese community to organize, fight discrimination, and assimilate.[59] Although representing the interests of the diplomatic and mercantile leadership, the newspaper provided a window into the hopes and concerns of the most humble residents.

Translations, however, present significant linguistic and interpretive challenges. To communicate with people coming from different districts around Canton, especially Taishan, Ng's newspaper employed an idiosyncratic Cantonese phonology, syntax, and spelling transliterated into traditional Chinese characters. Unique words and vernacular expressions, together with popular figures of speech and clichés derived from classical Chinese literature, enlivened the text. To unravel the prose, translators for this project were forced to surmise the original writer's intentions by analyzing colloquial expressions and metaphors.[60] Faced with spelling inconsistencies, names of important people, gods, places, streets, and institutions have been deciphered through crosschecking

with contemporary English sources to solve this veritable "Chinese puzzle."[61] To be somewhat consistent with terminology, the book employs a modified Wade-Giles system to romanize Chinese personal names. Whenever appropriate, Mandarin terms and phrases are transcribed into pinyin.[62] Official Chinese plague victims remained identified by their anglicized Cantonese names, entered in all official public health and medical records.

Despite the obstacles, the Chinese voice represented in the *Chinese Western Daily* furnishes a previously unexploited vantage point in a historiography that strains to offer multiple viewpoints and eschews ideological straightjackets. To provide a much-needed cultural and medical context, the book begins with a composite portrait of the first plague victim, based on biographical and contemporary information derived from multiple original sources. Subsequent chapters in Part I detail Chinatown's ecological, social, religious, and health-related aspects, essential for balancing our historical understanding. Next follow discussions about the ideology of Western sanitation and sketches of key participants involved in the discovery of plague in Chinatown. Part II chronicles and explains the sanitary and political events as they unfolded, until the disease disappeared.

Contemporary historiography favors the notion that disease is just another social construction. Indeed, society and culture were critical in shaping prevailing health conditions as well as defining and providing them with meaning. In this view, current scientific identifications of historical sickness are of little value since they tend to distort the past with alien conceptual categories.[63] Yet health and disease are also biological realities, and the subject of plague demands the integration of both social and scientific contexts. A synthesis of biological and social vistas offers a far more nuanced account and understanding of the complexities surrounding human life and health.[64]

This narrative adopts a balanced approach, examining health and disease as representing culture-specific constructions, politically based actions, and biological conditions. In spite of the perils of retrospective diagnoses and hints that Chinatown's plague may have been a fabricated hoax, there can be no doubts about the presence of plague—as currently defined—in early-twentieth-century San Francisco.[65] Key experts around the globe confirmed the diagnoses based on bacteriological cultures obtained from those infected with the disease; even a near-fatal laboratory accident thousands of miles away revealed its virulence.[66]

Plague remains a difficult disease to understand and reconstruct because of its intermittent appearance, complex transmission cycle, and endemic nature. Primarily affecting rodents, it is believed to have killed an estimated 200 million people during the course of three historical pandemics that changed the course of world history. *Yersinia pestis,* the bacterium that causes plague, remains one of the most deadly pathogens; yet it only incidentally afflicts humans through the bite of infected fleas leaving their dying animal hosts or through human-to-human contact with droplets carried in the air. This mostly indirect transmission sequence is, in turn, subject to additional factors, including geography, climate, and human lifestyle, all contributing to the contingent nature of plague outbreaks.[67]

Recent molecular studies have significantly advanced our knowledge of *Yersinia pestis,* exposing genetic characteristics that explain the bacterium's abilities to elude immunological defenses and reproduce in bodily tissues at very high rates. Following the decoding of its entire DNA sequence in 2005, scientists concluded that this germ represents a relatively recent mutation—about twenty thousand years ago—from a less harmful intestinal microbe into a relentless and lethal invader.[68] With the help of amplification techniques, old DNA obtained from human remains appears to confirm strains of bacterium at least since the Justinian pandemic.[69] A recent analysis suggests that *Yersinia pestis* evolved in Central Asia rodent populations near the western border with China. A specific lineage in the United States represents one of multiple historical transmission routes.[70] Perhaps future paleopathological investigations will uncover its presence in bones from early-twentieth-century Chinese plague victims in San Francisco.

The ecology of plague is driven by key nonhuman variables: the relative immunity of rodent populations and seasonal behavior of their flea species. In the early 1900s, California's urban areas were inhabited by subpopulations of susceptible rats; in San Francisco, the fierce and mobile Norway rat predominated with its subterranean nests and runways burrowed along sewer lines. These animals become infected through bites from different local flea species, particularly the *Ceratophyllus fasciatus* variety, which inject regurgitated plague bacilli from their largely blocked alimentary tracts.[71] The fleas' reproduction and capacity to infect depend on optimum temperature and humidity, decisive factors in the pathogenesis of plague.[72] Where homes are located and how they are built and maintained play significant roles, as do patterns of human life. This book will depict the spatial and temporal cycles of the Chinatown outbreak and point

out ecological circumstances that may have favored or hindered the appearance of plague in humans.

To unpack historical narratives fully, readers must consider the identity of the storyteller and the historical time in which any work is written. My own transnational status—I was born to emigrant German parents in Argentina, and I subsequently immigrated to the United States—has contributed to an understanding of the pressures of cultural assimilation, amplified by the political and bureaucratic vicissitudes surrounding my own legal entry. My residency in two West Coast cities, San Francisco and Seattle, both with Chinatowns, provided exposure to transpacific influences and people. A medical background allowed me to delve into the scientific aspects of plague and to appreciate the tensions between clinical experience and laboratory diagnoses. Witnessing the early stages of the AIDS epidemic in San Francisco prompted a series of comparisons between the psychosocial aspects of historical plague and this highly lethal new scourge. Although each disease occurred in a different temporal, medical, and social context, my historical training suggested comparisons that were helpful in advancing our understanding of issues such as stigma, denial, resistance, and race.[73] Now, twenty years later, this book follows in the wake of new epidemic threats such as avian influenza[74] and public health challenges linked to the viral H1N1 flu pandemic. Even SARS briefly rekindled anti-Chinese racial stereotypes and deep fears of invasive and lethal disease.[75] Although it remains difficult for me to transcend my Western worldview, I have nevertheless tried to create a nuanced account that includes Asian beliefs about the nature of their world. Empathy contributes to understanding.

Storytelling should be the aim of every historian. My hope is that this book, with its chronological and thematic arrangement, can reach people interested in the perennial phenomena of politics, race, sanitation, and disease. Beyond recreational or factual reasons, the saga of Chinatown should stimulate our imagination, raise new questions, and suggest future improvements.[76] Trust in science and government is ebbing. Historical perspectives seldom inform their strategies and policies.[77] Many people are increasingly skeptical and even hostile to actions designed to protect them from harm. There is an urgent need to reexamine past disease outbreaks and explore them within their sociocultural and medical contexts. Plague remains a biological reality endowed with sufficient lethality to be considered a biological weapon, a fact that has generated a host of

historical reflections.[78] If we are willing to learn from the past, we must understand the cultural prejudices and social structures of populations affected by epidemics so we may devise policies and coordinate procedures tailored for each occasion. Everyone, not only the authorities and medical profession, has a stake in being informed about the rationale of public health goals and actions. Fear creates a dangerous climate of uncertainty and irrationality capable of frustrating all best intentions.[79]

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The People of Tang in San Francisco

> The Cantonese are the commercial, migrating people of China, the people who take risks, exploit fields and venture into high business. We have come to the Western countries to live, stir up commerce on behalf of China and to get Western people interested in our country and us.
>
> —NING YUNG BENEVOLENT ASSOCIATION (1900)

A Migrant from Taishan

San Franciscans identified him by his Cantonese name: Wong Chut King,[1] also nicknamed Chick Ging.[2] His sketchy life story suggests that he fit the traditional stereotype of a thrifty, hardworking Chinese migrant whose California dream of riches remained tragically unfulfilled.[3] An ordinary middle-aged laborer or "coolie" living in the city's Chinatown, Wong's "rice bowl" (Cantonese expression for job) was a rat-infested lumberyard on Pacific Street, a favorite destination for residents looking for old timber to remodel their crumbling dwellings. His wife had remained in China, probably taking care of his parents.[4] A common Cantonese practice was to marry before going abroad to make money. Like the majority of menial workers living in Chinatown, Wong originally came from a small hamlet. His village was Bei Keng (Bak Hang)[5] in Ningyi (Xinning) County (after 1914 called Taishan or Toischan), a district located at the southwest corner of China's Guangdong province. While socioeconomic conditions in this region were among the best in China during the second half of the nineteenth century, Xinning was a country of hills, mountains, and

small valleys with small plots of farmland that by the 1850s could no longer sustain the heavily populated north and central portions. With its poor, sandy soils, and a difficult terrain for building roads and canals, the region lacked easy access to nearby Guangzhou (Canton) and the fertile Pearl River Delta, an area engaged in profitable international commerce and familiar with Western traders.

When Wong was born around 1859, his homeland was embroiled in a bloody clash between clans from the Punti (original land), the established population of farmers, and the Hakka (guest families), relative newcomers who had been settling in Xinning since the seventeenth century. The conflict not only killed thousands of people but also contributed to the hardships caused by poor harvests, famines, and epidemics. Typhoons, flooding, and earthquakes took their toll. Looking for work, Taishanese residents started migrating to Guangzhou and the Pearl River Delta. There, they made up an unskilled, but necessary, labor force.[6] Populous, endowed with its own culture and dialect, Xinning County later became the most common homeland for overseas Chinese as more than a million young Taishanese sought their fortunes abroad.

Based on surviving reports, Wong's decision to migrate in the mid-1880s was not only based on local demographic pressures and economic improvement. In Cantonese, California was known as Gum Shan, the Gold Mountain. Stories of its purported riches had already lured many of Wong's clansmen. But Wong was married, in his twenties, and his family's breadwinner. Such a decision to leave family and motherland violated Confucian precepts. In a society with strong collectivist values, individual identity was rooted in family, clan, or village. However, working abroad could be understood as a personal obligation to preserve family and community.[7] Hoping to be rewarded with social mobility and the mythical riches of California, the adventurous risked the long voyage across the Pacific.[8]

Those who knew Wong later insisted that he had lived in Chinatown for about fifteen years. If that was true, he may have arrived after passage of the 1882 Chinese Exclusion Act, making him, along with many others, an illegal immigrant.[9] Wong could have been directly recruited from his village and sent to Guangzhou or Hong Kong. Labor brokers usually sold tickets for trips across the Pacific on credit. In 1884, possibly the year of his departure from China, nearly 20 percent of the migrants traveling from Hong Kong to British Columbia via Japan were from Xinning or Taishan. After arrival, Wong may have crossed the border from Canada, joining other illegal immigrants who were assisted by secret organizations specializing in human trafficking.[10] Those lacking proper

documentation under the terms of the 1892 Geary Act were in constant danger of being apprehended and forced to return to China.[11]

Even before the rush to the Gold Mountain, Chinese arrivals in San Francisco—mostly prosperous traders and merchants—clustered around a plaza later renamed Portsmouth Square, center of original Spanish settlement established at the Yerba Buena Cove. Together with other newcomers, most Chinese occupied an area near the bottom of the eastern slope of Nob Hill facing the waterfront and long wharves built over the mudflats of the shallow but protected anchorage.[12] Partly sheltered from the cool marine air, the area known as Tang Yen Fau (Port of the People of Tang, or more precisely Tang Yen Jie, Chinatown), benefited from dry summers and mild, rainy winters, boasting a microclimate of sunny fogless afternoons and cooler nights. Spring usually came in February or March and Autumn began late in October. Surrounded by an amphitheater of hills with ample views and immediate access to water, the town's business district was situated in "the fairest portion of the city."[13]

Forced to operate within the original Spanish gridiron of streets and alleyways radiating from the central plaza, the newly arriving Chinese obviously had limited control over propitious locations for their businesses and homes. With the exception of a handful of temples and gravesites,[14] the Chinese encountered few opportunities to practice the ancient principles of feng shui—the position of wind and water—that promised balance, happiness, and prosperity.[15] Inspired by Daoist notions of the natural world, local climate, geographical contours, and the placement of buildings played important roles in Cantonese villages, where proper orientation was considered indispensable for protection from malevolent spirits. Life's successes and failures depended on places capable of harnessing the mythical "dragon's breath."[16] Yet, whether deliberate or coincidental, Chinatown's urban landscape startlingly conformed to certain basic feng shui principles.[17] With Nob Hill at its back breaking the westerly winds, the cosmic energy *qi* representing the *yang* principle gently circulated easterly toward the *yin* body of water—San Francisco Bay—with its periodic tides providing the necessary balancing effect. Protection from Telegraph Hill to the north and Rincon Hill to the southeast created an omega-shaped space opening toward the water that could be interpreted as being a Chinese "dragon's lair." Moreover, the whole neighborhood faced the rising sun—the land of the living. Properly protected from evil influences on all three sides by hills, this divinely sanctioned setting promised to bring prosperity and happiness to its dwellers.[18]

Like other arriving immigrant groups, the Chinese were content to settle in flimsy temporary structures hastily erected from discarded ship lumber. Italian or American two- or three-story buildings with cellars, erected from imported brick and granite, followed; in early years no distinctive Chinese architecture emerged except for a pagoda-style theater, the Hook Tonk Tong, which was directly imported from China.[19] Stores were located at street level, living quarters on upper floors. By 1854 this area, populated by nearly 2,000 transients, was already known as "Little China."

Framing Chinese Space

As San Francisco's waterfront expanded to the east, business shifted in that direction, while new residential areas sprang up in the surrounding northern and western hills. These changes left the Chinese in a transition area of about twelve city blocks that included Portsmouth Square. Because of the gold-rush-triggered real estate and building boom in the 1850s and 1860s, most properties in that area came to be owned by non-Chinese landlords. Uncertain titles, conflicting legal opinions, and abundant litigation characterized the early real estate market, and owners not only battled each other but also confronted hordes of squatters. In spite of racial hostility and legal barriers, a few wealthy Chinese merchants and their associations managed to own their headquarters.[20] By 1878, a new law forbade aliens excluded from citizenship like the Chinese to acquire title to property in California, effectively making them perpetual foreigners.[21]

Living largely in the shadows, white property owners became the real lords of Chinatown. According to the 1900 federal census, most were wholesale merchants, bankers, or "capitalists" of Italian, German, and French descent, seeking a dependable return from their investment in storefronts and lodging houses. A majority owned one or two lots with buildings, and turnover was slow. As absentee landlords, they were content simply to collect a steady stream of high rents through long leases negotiated by their real estate agents.[22] Later, faced with aging buildings, the owners demanded lower assessments and established a Chinatown Improvement Association in 1898 for mutual protection from city and renters' demands for repairs.

By 1900, nearly half of the proprietors were women—mostly wives and widows endowed with inherited estates—interested in relatively safe investments that promised reliable and regular income. As early as 1849, the California constitution recognized that all property belonging to a wife either owned before

her marriage or acquired afterward as a gift or inheritance was considered separate and not in common with the husband's.[23] Women controlled both the property and all earnings derived from it.[24]

As most non-Chinese people began to move out, the district quickly assumed the characteristics of a foreign colony, a splintered microcosm of ethnic groups, clans, guilds, and commercial bodies regulating their own affairs and strongly resenting all interference from local and state authorities. Although Chinatown's original architecture displayed few distinctly Chinese features, over time the new residents adapted their own style of spatial arrangements and aesthetics to the area.[25] Like other immigrants, the Chinese sought to organize their space on foreign soil by recreating a degree of spatial familiarity and social intimacy typical of their ancestral Guangdong towns. With tacit approval from landlords, Chinese occupants remodeled their spaces, adding wooden balconies, backyard shanties, and multiple room partitions. As in China, most entrances to buildings were diverted, for additional privacy and protection,

Bartlett Alley, Chinatown, ca. 1900, with its litter and makeshift wooden balconies.
The Bancroft Library, University of California, Berkeley, BANC PIC 1985 084:106-ALB.

into narrow pedestrian passages between existing structures. Taking advantage of the steep grade of Chinatown's terrain, some houses were linked through underground passages between basement levels, their exits to the outside secured by iron gates. As in China, houses embodied Confucian family values and were divided into living and working quarters to provide privacy and intimacy. Sheltered, they were considered sanctuaries, harnessing positive cosmic energy for the benefit of their occupants. Absent from the district, however, were the women who usually played critical roles in shaping domestic space.[26]

Although modern cable cars traversed Chinatown's major arteries, dwellers walking through the smaller streets had the illusion of being magically returned to southeastern China.[27] Sacramento Street, later known as Tang Yen Gai (Street of the Tang People), featured grocery stores, tailor and barber shops, and restaurants.[28] Waverly Place, or Ho Boon Gai (Fifteen-Cent Street), became famous because of the price of its barbershops but also featured associations and temples (*mui*).[29] Makeshift alleyways ended in small courtyards (*tianjing*) with little light and air facing the entrances to terraced lodging houses. Each floor and many individual rooms had coal- or wood-fired open stoves, sometimes built as a brick bench, popular in south China, or sometimes just a portable tin can. Lacking ventilation, they created clouds of smoke and monumental fire hazards. Outdoor stairways and ladders provided access to upper apartments, sometimes well appointed with teak or bamboo carved cabinets and embroidered silk curtains. Windows were protected with heavy wooden bars. Newly created awnings and painted porches projected into streets and alleys, narrowing them and often leaving everything in shadow. In this crowded urban setting, potted plants substituted for traditional gardens and connected residents with nature.[30] Painted balconies featuring imported lanterns, an assortment of Chinese-language banners and posters, and the ubiquitous store signboards in black and gold letters, gave the neighborhood a distinct look.

Rooftops were divided by picket fences, their extended eaves further blocking the sunshine. Courtyards sported gates decorated with dragon or lion designs to ward off ghosts and evil spirits. Ground-floor stores protected by iron screens became sandwiched between residential basements and upper-floor restaurants, meeting places, or living quarters topped by airy loggias for the affluent. Other buildings featured upstairs hotels and prostitution lodges, as well as gambling dens, while dark and damp basements hosted sleeping bunks, laundries, and light manufacturing facilities, as well as shops and opium dens.[31] Prevented from moving beyond the district's original borders because of widespread racial discrimi-

nation, Chinatown's population crammed into the existing buildings and newly excavated basements. By the late 1860s, congestion soared as thousands of former railroad workers returned to the city. Frugal and poor immigrants were happy to rent a hole in a tenement room or basement. Packed in one four-story building, two hundred Chinese shared a 34-by-137-foot space.[32] Small cubicles became common, some constantly occupied with dwellers sleeping in relays. The original plaza became Fa Yuhn Gok, the "garden corner," a welcome recreational oasis for old people and playground for children away from the claustrophobic warren of shops and tenement houses.

After decades of neglect and minimal upkeep, many of Chinatown's aging structures grew grimy and dilapidated, routinely described by local journalists as "tumble-down rookeries." Amid environmental degradation, the quarter seemed eerily suspended in time. Broken windows were covered with rag paper, crumbling walls were supported by planks, and rooms and roofs were full of holes. Already burdened with payments to sponsors and families at home, most Chinese renters tolerated the deteriorating conditions, unable or unwilling to make repairs. Responsibility toward supporting kin trumped everything. But owners of tenement houses still preferred Chinese tenants because they faithfully paid the exorbitant monthly rents. Neglect of their properties was not merely driven by greed but also by racism; in their view, the "barbaric Mongolians" deserved to live in such conditions.

Taking advantage of Chinatown's segregation and with housing in the neighborhood increasingly scarce, building owners also put more pressure on their Chinese tenants to sign leases that placed the duty and expense for maintaining the premises squarely on their shoulders. They also petitioned the San Francisco Board of Equalization for lower assessments of their depreciating properties. Proprietors felt no public duty to mend the premises unless they had been specifically threatened by the San Francisco Health Board and had exhausted all legal measures to avoid the repairs. Another excuse heard from landlords about retaining the status quo was the growing uncertainty about the future of Chinatown. Private property was the foundation of America's capitalism, democracy, and individualism. "Privatism"—the right to dispose of one's property according to self-interest based on economic market forces—continued to be widely respected and cherished, trumping "civicism," the notion of intervening to promote the city's common good.[33]

"Property leased to Chinamen in San Francisco is among the most productive in the city, and 30,000 Chinese pay annually one million dollars in rents

alone," wrote one observer.[34] In good years, owners received 9–12 percent net income from their Chinatown properties, contrasted with only a 5–7 percent return in other parts of the city. Writing in the late 1870s, a missionary observed that in spite of longer leases, Chinatown rents kept increasing because of a dearth of housing, forcing tenants to divide and sublet their spaces, often for an 18–24 percent gain, further degrading the already overcrowded living conditions.[35] There was nowhere else to go.

Such predatory practices earned owners little respect from the general public. As early as 1873, a visitor commented on the basic hypocrisy: while Chinatown was denounced as a "blot on the city," houses in which "vile practices" such as gambling and opium smoking occurred were the property of "men who call themselves respectable, whose children attend church and who are not ashamed to draw their living from the vice and wretchedness."[36] Each side blamed the other for the dreadful conditions. Anti-Chinese voices sought to turn the argument around and denounced Chinatown's population for running down properties they were renting through excessive partitions and for painting the front of buildings in garish colors, such as green, yellow, and vermilion.[37] Since many landowners were prominent citizens, actions by the San Francisco's officials to declare the crumbling properties "nuisances" to be abated or razed were usually resisted through legal injunctions.

The newly arrived Wong lodged in Chinatown's old "Five Stories," the prominent residential Globe Hotel, located at the corner of Dupont and Jackson Streets. The business hub of the quarter, Dupont Gai (originally called Calle de la Fundacion) featured banks, offices, restaurants, dry goods stores, and curio and herbal shops. Fashionable in the 1850s, the hotel's glory days were now long over. In fact, the rundown landmark had been recently characterized as a "ruined pile of weather-beaten brick" sheltering the "flotsam and jetsam of Chinatown."[38] Illegal gambling on the premises was infamous, and sentinels patrolled the halls, guarding against surprise police raids. For decades, the notorious German real estate tycoon and slumlord Ferdinand Hesthal owned the property. His agents managed to transform the building into a crowded tenement house sheltering nearly 300 people living in small cells. "Like rats in a barrel, poor, unwashed heathens crowd together in little cubby-holes," proclaimed one local newspaper.[39]

Hesthal, who owned the Hybernia Savings and Loan Bank, possessed the resources and legal assistance to battle successfully with San Francisco's health officials regarding sanitary violations. Finally declared a nuisance, condemned,

and slated for demolition in September 1896, the Globe Hotel was rescued by the banker's real estate agent, Gus H. Umbsen, owner of one of the largest firms in the city. To the delight of renters such as Wong, Umbsen managed to save the decrepit structure through a temporary deferral that allowed lawyers time to obtain a permanent injunction in federal court.[40]

Wong's living quarters were located beneath the sidewalk. A makeshift burrow dug out from the original cellar at the intersection of both streets, the uncomfortable space, full of decaying refuse, was lined with ordinary rough boards, one side partially closed off from the leaking cesspool. Crates served as tables and storage; a brick bench housed an open fireplace for cooking, together with a sink and water closet or simply a pit urinal. Privacy was nonexistent. Two or three comrades, sleeping in relays, usually shared one small, grimy bunk, using wood blocks for pillows. Flickering oil lamps barely illuminated the smoky, crowded hole permeated with a rancid smell.[41] With plumbing connections broken, Hesthal allowed the excavation of a central cesspool located under the hotel's cellar. The sewer line to the street was inoperative and dry, its pipe offering a perfect nest for rats.

A hovel in an excavated basement was not an unusual residence for a person of Wong's standing. While Chinatown's population struggled to attain feng-shui-sanctioned symmetries, indoor divisions and elevation remained important markers of class and status. Thrift was considered an important virtue, and self-gratification always took a back seat to family obligations. Although in recent years the area had experienced a substantial exodus of laborers returning to China or moving on to Mexico, higher rents precluded most poor laborers from living above ground. Most of Chinatown's buildings and sewers were excellent breeding grounds for Norwegian rats and their fleas. Occasional demolitions of decayed and tumbling structures released hordes of squealing rodents scattering from their regular runways and nests.[42] They burrowed between the walls and rooftops, improvised balconies, outhouses, and alleyways, as well as near pipes and sewer lines. By American standards, only subhumans could exist in such an environment.

Lifestyles and Governance

Arriving in Chinatown, Wong faced a rigid, stratified, and socially divided society.[43] The basic Chinese unit centered on the family, clans, and villages, but the contract system brought to American shores mostly individual strangers,

splintered by geography and kinship, who suddenly found themselves dumped into an alien culture and separated from their original social moorings.[44] Yet, culturally, they considered themselves "natives," literally "village people," who pursued survival and happiness through social relationships. A Cantonese folk saying—"same sound, same air"—stressed the existential importance of these contacts and the desire to live in a familiar environment before returning to China.

For workers like Wong, the forced bachelor life encouraged bonding with other men in similar social conditions and the establishment of cooperative living, eating, and recreational activities. Yet lack of skills and educational opportunities hampered social and economic improvement. Trapped in a claustrophobic, noisy warren of shops and tenement houses, Wong and similar "birds of passage" went about their daily routines, patronizing kindred shopkeepers, meeting friends and clansmen at particular street corners, and swapping the latest news. Homesick, many were still intent on returning after earning enough money to feed their families and live in comfort. Yet in the new American capitalistic system, keen competition among people of similar trades was widespread; differences in language and customs and the influence of tribal sentiment spawned rivalries and discord.[45] Conflicts and disputes seemed endless, though they were commonly seen as reflecting the perennial yin-yang tensions operating in a harmonious cosmos.[46] Nevertheless, as workers and consumers, Wong and other Chinatown residents collectively represented the district's essential economic backbone.

For racist San Franciscans, Chinese people were generically labeled "John Chinaman," a form of slander implying inferiority and contempt.[47] They could be easily distinguished by their physical characteristics and dress. Contemporaries believed the "yellow" Chinese to be susceptible to loathsome diseases not only because of their inferior racial heritage but also on account of weak constitution and vitality affected by diet and lifestyle.[48] Since food preferences reflected important ecological and cultural aspects, they became important targets for the expression of xenophobia.[49] The fact that Westerners living in China seldom became casualties during epidemics was attributed to "European blood and stamina," code words for immunity and strength. This perceived Caucasian physical superiority was not only considered hereditary but a tribute to proper nutrition and hygiene. According to contemporary physiological ideas, a diet rich in protein obtained from meat was critical for building resistance against disease. Rice eating, by contrast, caused physical weakness and

lowered immunity. To be sure, many Chinese consuming mostly polished rice suffered from beriberi, a condition recognized in 1898 and endemic among Asian laborers and sailors. However, Charles W. Dabney Jr., U.S. assistant secretary of agriculture, later suggested that natives of India and China suffered in greater numbers from plague simply because they were rice and grain eaters.[50]

The oversimplified rice-meat dichotomy quickly became a favorite phrase employed in racist anti-Chinese rhetoric.[51] Replying to accusations about disease susceptibility, the *Chinese Western Daily* insisted that ordinary Chinatown residents were considerably healthier than their relatives in China.[52] In Guangdong province, hot summers made sleep difficult; diet was mostly vegetarian, consisting of limited amounts of coarse grains and vegetables, while daily heavy labor sapped human energy. Because of crop failures, abject poverty, and extreme crowding, malnutrition and disease were frequent. In Chinatown, by contrast, the temperate climate prevailing on the San Francisco peninsula with warm days and cool nights was much more agreeable. Moreover, residents consumed more fish and meat; nobody was starving, and while work was arduous, everybody enjoyed at least one day of rest on Sunday.[53]

Wong and other workers sought to overcome loneliness and occupational vulnerability through multiple memberships in clan and trade groups, benevolent associations, secret brotherhoods, and political parties. Huddling closely together in the *kai-fong* (neighborhood) with friends and secret "brothers" was socially and culturally comforting. Homesick peasants like Wong sat for days "packed like pickles in a bottle"[54] attending long-winded theatrical performances featuring the adventures of familiar mythical Chinese heroes, thus experiencing the illusion of having returned to their ancestral land. In fact, the entire quarter employed the Chinese lunar calendar linked to the emperor's reigning years side by side with the traditional Gregorian one. Day and night were divided into twelve periods of two hours each and adhered to the standard Western time prevalent in Hong Kong. The arrangement reflected a one-day-and-fifteen-hour difference across the international time zone, bound to cause confusion and unpunctuality.[55] In the midst of such parochialism and deprived of American naturalization rights, they continued to see China as the center of their universe. Although they adapted to their new circumstances, these men missed their families, friends, and neighbors.[56] Many wanted to remain in contact with them; letters were exchanged. To save face, the tone was optimistic, and conditions in America were said to be promising, often a ruse that masked the vicissitudes of their hard labor and constant discrimination. Back in Taishan,

"Gold Mountain guests" like Wong were admired and believed to be wealthy. Those returning eagerly sustained the illusion of good fortune, further fueling the exodus of relatives and friends.

Because of obstacles to the immigration of women, Chinatown's male residents were deprived of the obligations and advantages of family relationships. Most lived unfettered from the usual bounds of female domesticity and upkeep, displaying a stoic acceptance of the drawbacks and hazards of living in a ghetto. Single life helped men endure the vicissitudes of racial maltreatment. Poverty was rampant; the workers' extreme thrift was, in part, a cultural trait developed during millennia of hardships.[57] Most families back home depended on the migrants, often their main bread-earners, for financial survival. Unable to uphold many of their filial duties—they missed worshiping ancestors and failed to provide male heirs for the survival of their family line—the least these frugal

Scene on Dupont Street, Chinatown's main thoroughfare, ca. 1900, with street vendors.

Photograph by Isaiah W. Taber. The Bancroft Library, University of California, Berkeley, 1905.06485:044-PIC.

men could do was to send money. To facilitate contacts and insure the transfers, a number of Chinatown businesses were linked by mail and telegram to a wide trade network of Gold Mountain firms (*Jinshan zhuang*) based in Hong Kong. These merchants provided migrants with an array of Chinese imported goods, including favorite comfort foods and herbal remedies. In the absence of banking and postal services, the Hong Kong office cashed checks and distributed the money with the help of couriers located in Taishan's market towns.

By 1900, South China was prospering, spurred by the influx of overseas cash. Although far away from home, Chinatown denizens remained committed to the survival of their original communities. In fact, generous spending created booming local economies, sponsoring the construction of new homes, schools, and temples, while bringing affluence to many families. By contrast, agricultural pursuits suffered, fields remained barren, and food prices soared, even forcing the importation of foreign rice.[58] Paradoxically, lucky and admired "Gold Mountain wives" (*Jinshan sao*) like Wong's spouse came to live in comfort, even luxury. Aware of China's local prosperity, migrants like Wong felt pride in their collective accomplishments.

Not a few Chinatown laborers were illiterate, forced to rely on a handful of "interpreters" and scribes who charged for their services. Fortunately, for nearly two millennia, written Chinese had remained mostly unchanged and continued to be the universal vehicle for communication throughout the empire. For those who could read, daily political news from home was available in several local Chinese newspapers.[59] A more direct way of conveying information were official proclamations issued by particular groups, benevolent associations, and diplomatic representatives. These announcements were pasted on "dead" walls in the district for perusal. Another common practice was to paste advertisements. Red placards announced the nonpayment of debts, exposing delinquent creditors to public ridicule. Reading such walls of shame remained a favorite Chinatown pastime.[60] Gossip and rumors were popular sources of information for people, literate or not, who hungered for news about the affairs in the Chinese quarter and beyond.

An alien village in the heart of urban San Francisco, Chinatown was forced to handle problems according to its own ingenuity and rules. Without regular municipal supervision and protection by San Francisco authorities, new arrivals were forced to seek assistance from clan or surname associations, mutual aid societies, craft and trade guilds, and secret brotherhoods.[61] The Wong (Huang) clan or family association was considered the largest and most powerful in the

Chinese kingdom, tracing its origins to the time of Confucius. In addition, new arrivals could find regional benevolent societies (*huiguan*) representing several districts within Guangdong province. China possessed a long and venerable tradition of sponsoring private charitable organizations to aid the poor based on Confucian and Buddhist precepts.[62] Sponsored by wealthy merchants, these societies had provided social services in leading Chinese cities since the late Qing dynasty. While kinship anchored clans, mutual aid organizations represented geographic areas. In conformity with Confucian principles of social coherence, integration, and assistance, these organizations functioned as surrogates for the absent relatives in China. Operating in San Francisco since the early 1850s, these societies furnished temporary lodging, assisted in negotiating labor contracts, and provided return transportation to China, legal assistance, and places of worship.[63] Some sponsored shelters, called "rooms of perpetual peace," for sick and dying members. In the event of accidental or illness-related death, the district societies also pledged, for a fee, to organize a proper funeral and later collect their members' bones for shipment to the homeland for a final burial.[64]

Wong belonged to Sze Yup (Siyi Huiguan, Four Districts Association), which represented the region west of the Pearl River Delta. Most Taishanese, however, sought membership in a splinter organization, the Ning Yung Benevolent Association. This organization was among the oldest (founded in 1852) and largest "companies" representing clans from that district; Ning Yung counted among its membership half of Chinatown's labor force.[65] Organized in 1851, Sam Yup (Sanyi Huiguan, Three Districts Association), also known as the "Canton Company," came to represent migrants from more affluent commercial, silk-manufacturing, and agricultural districts surrounding that city. Many of these men already possessed contacts with Western businessmen and some were "compradores" (local middlemen for foreign traders). As they set down roots in America, these merchants, herbalists, and craftsmen represented the original "China Boys," widely accepted in early San Francisco since they could communicate in English.[66] Populated with more educated and prosperous members, the Sam Yup organization sought to lead and control Chinatown.[67] With assistance from diplomats, all benevolent societies strove to respect and preserve their members' Chineseness while competing for loyalty.[68]

Responding to growing anti-Chinese sentiment in California in the late 1850s, San Francisco witnessed the confederation of several Chinese district associations into the Chinese Public Association (Zhonghua Zong Huiguan), popularly

known by locals as the Six Companies.[69] Their mission in San Francisco was to provide employment and distribute aid to members and to remain guardians of Chinese tradition and cultural identity.[70] The Six Companies also arbitrated disputes among members, offered legal representation for cases adjudicated in American courts, and dispensed credit and capital. Working with the steamship companies, it also prevented Chinese from leaving America until they had paid all local debts.[71] The new umbrella organization sought to transcend ancestral and geographic affiliations, functioning as the unofficial government of Chinatown and working directly with local, state, and federal authorities.[72] Presidents were recruited directly from the scholarly elite in China. The post of secretary was the most coveted position in Chinatown, shared or rotated between members from the four most powerful clans—Wong, Chin, Chang, and Lee—that made up Chinatown's equivalent of an aristocracy. These men monitored the business and social affairs of every Chinese in America, keeping burial, birth, and marriage records for every family.[73]

The confederation's access to the American court system had no Chinese precedent. In the homeland, the law was never a contest between opponents; every disputation was submitted for arbitration by a third party and adjudicated in a mutually agreeable way. Unlike the Confucian imperative to follow the law, overseas Chinese eagerly sought American justice for a redress of grievances regarding discrimination and habeas corpus. Most extramural legal battles centered on the principle of equal protection and took place in federal or local jurisdictions. They required collective action from the confederation with assistance of prominent American lawyers, engaged through generous retainers. Their task was to challenge judicial rulings and the implementation of local, state, and federal laws considered detrimental to the welfare of the Chinese community.[74]

Following the 1882 Chinese Exclusion Act, the Six Companies' power and prestige dimmed. Although the leadership opposed discriminatory legislation in the courts, the executives were blamed for their apparent passivity, allowing anti-Chinese forces to prevail. Denied entry, lowly laborers suffered more under the restrictive act while merchants continued to travel and enter with less difficulty, although bringing their wives and children required unverifiable Chinese documentation. Later, the Geary Act placed thousands of illegal Chinese workers in constant jeopardy, subject to detention and immediate deportation.[75]

The power of Chinatown's Six Companies further eroded with the advent of diplomatic representation in the 1880s. Thereafter, consuls assigned to San

Francisco nominated candidates for huiguan leadership positions, forcing the Six Companies into a mere executive role, with final decision-making placed in the hands of top local diplomats who also acted as referees in internal conflicts. If further mediation was necessary, matters were laid before the Chinese minister in Washington, supreme arbiter of an authoritarian structure representing imperial rule.[76] Local merchants rather than imported Chinese scholars became huiguan leaders, leading to further tensions between the various Sze Yup societies and the Sam Yup Association. This rivalry culminated in 1897 with the breakup and bankruptcy of the Six Companies after the withdrawal of all Sze Yup associations. Following negotiations with the Chinese minister and an intervention from President McKinley, all current Chinese diplomats were recalled to China and a reconstituted federation emerged, no longer dominated by Cantonese merchants.[77] The 1898 arrival of a new consul general, Ho Yow, seemed to reenergize the community, especially as his immediate superior, the Chinese minister in Washington, was his brother-in-law.[78]

Politics and Violence

By 1900, the social, economic, and political gulf between Chinatown's workers and merchants had widened significantly. Chinese merchants considered menial laborers like Wong to be ignorant, corrupt, and contemptible. The workers, in turn, tended to blame the racial discrimination and poverty they suffered on the deteriorating political conditions in their homeland. Cantonese characterized their hand-to-mouth existence as "growing a tree in the morning and cutting its wood in the evening."[79] Working sixteen to twenty hours a day for less than a dollar, six days a week, ordinary "coolies"[80] increasingly felt defeated. Aging and increasingly less agile to compete for seasonal jobs, time was not on their side, forcing thousands of residents to return to China without savings rather than face unemployment and destitution. From a peak of more than 26,000 people in 1890, the Chinatown population in early 1900 was estimated at fewer than 14,000.[81]

Merchants ranged from wealthy financiers and traders to modest store owners, manufacturing bosses to restaurant proprietors. Instead of Confucian scholars from the ruling Chinese elite, most came originally from China's lower classes. Aided by pre-migration contacts in Chinese port cities such as Guangzhou, the richest among them prospered through involvement in the international import-export business, producing enough income to afford traditional upper-class

lifestyles. Accompanied by their families, these merchants carried on Chinese traditions. Many lived in lavishly outfitted four- or five-room luxury apartments on the upper floors of buildings located in the southwest part of Chinatown, especially near Stockton and Sacramento Streets. Their wives—referred to as "inside persons"—followed traditional roles of seclusion, living in separate, upstairs quarters simulating gilded cages. Because of their refined lifestyle and social manners, ordinary San Franciscans considered elite merchants to be "good Chinamen." Extremely courteous and deferential to their white trading partners, these mandarins sought to embody the wisdom and aesthetic of their ancient homeland. Many of them were fluent in English, serving as liaisons with San Francisco authorities and making a mockery of race as a biological and moral marker.[82]

In Chinatown, rumors were circulating that China was in trouble. Because of their traditional and cosmic sense of nationhood, all Chinese worried about the future of the embattled fatherland so intimately linked to their identity and future fate in a strange land.[83] The empire had already lost a war against the Japanese and was forced to make further concessions to European countries. Then, in 1898, senior officials at the imperial court removed the young Emperor Guangxu after he initiated a series of modernization efforts within existing Confucian ideological and social class divisions.[84] The failure of the "Hundred Days' Reform" and reinstatement of the conservative Empress Dowager Cixi to the throne forced many progressives to flee the country. They established the Bao Huang Hui (Society to Protect the Emperor), popularly known as the Chinese Empire Reform Association, an international organization dedicated to restoration of the enlightened leader.[85]

Menial Chinatown laborers like Wong Chut King were in a quandary, their loyalty severely tested. While they enjoyed the freedom from China's cumbersome bureaucracy and imperial police power, they still considered themselves subjects of the emperor and wished to restore him to power, despising the Empress Dowager as a corrupt usurper. Thousands congregated at the Washington Street Theater, attending meetings sponsored by the local chapter of the Reform Association. In violation of Confucian order and respect for authority, they eagerly listened to appeals from Tong K. Chong, editor of San Francisco's *Mon Hing Yat Bo* (Chinese World) newspaper.[86] Chong vigorously denounced the current Chinese leadership, seeking funds to raise an army and overthrow the empress.[87] Besides the need for modernization and greater freedom, one of the arguments for revolution found particular resonance among the mostly

aged men in the audience: Chong boldly predicted that the current policies would lead to the dismemberment of China by foreign powers, notably Britain, Germany, and Russia.[88] The consequences, he explained, would be catastrophic for Chinatown's migrants: should they by any chance die in America, there would no longer be a resting place for their bones in the ancestral homestead. More radical individuals wished to eliminate dynastic rule altogether, dismantle old class hierarchies, and institute religious tolerance toward Christianity under a republican government. Confusion reigned, prompting a concerned Consul Ho to complain: "I know that in this city there are many young men who do not fully understand what the difference is between reform and revolution."[89]

While people in China respected their ancestors, fathers, and elder brothers, as well as the local wise men who governed them, such restraints weakened after they immigrated to America. To be sure, most Chinatown dwellers still focused intently on matters related to family, clan, and district, but continued residence and greater mobility created less dependence on traditional institutions. Increasingly, Chinese bachelors sought support and advice from friends, coworkers, and fraternal societies.[90] If he sought assistance for crossing illegally into the United States, Wong was probably already a member of one or more secret brotherhoods. The term *tong*, originally reserved for the hall of a guild or mutual aid organization, became a catchword to designate all secret brotherhoods operating in Chinatown. They claimed to derive from a Chinese secret organization, the Triad Society, operating since the seventeenth century. Its original aim was mostly political: overthrow the Manchu Qing dynasty. By the 1850s, however, this underground fraternity, posing in Guangdong province as a mutual aid society, came to offer protection and fellowship to the poor and oppressed. In the fraternity's quest for an economic base, many of its lodges became involved in illegal activities such as gambling and prostitution that offered quick financial rewards.

Tongs were among the early arrivals in Chinatown. With trained warriors from their membership offering protection, they constituted an alternative power base. They competed with the district associations, ready to offer assistance and provide forbidden forms of recreation. Tongs usually attracted younger, aggressive, and often violent males, some with criminal backgrounds in China; others were outcasts from other associations or rebels alienated from the merchant oligarchy. These individuals came to be locally known as "highbinders" because of their practice of binding their queues "high" to better elude their pursuers and avoid capture.[91] San Franciscans widened the meaning

of the "highbinder" label to designate not only tong members but all individuals committing criminal acts, including blackmail, gambling, pimping, and murder.

Among the illegitimate enterprises supported by the tongs in Chinatown was opium smuggling and use. According to missionary reports, addiction to the drug, first promoted as a tonic and cure-all by British merchants, became rampant in Guangdong province by the late nineteenth century. Traditionally employed against pain, opium came to be linked to other illegal activities, from prostitution to gambling, robbery, and murder.[92] Addicted Chinese migrants already practiced opium smoking in their mining and urban settlements in the West. Indeed, use of the "dazzle juice" quickly became a prominent element in the stereotypical construction of "John Chinaman."[93] By 1900, a local Chinese newspaper strongly criticized the practice of bringing tourists into Chinatown to visit degrading opium lairs. Estimates suggested that the district operated over two hundred dens in basements and alleyways,[94] with about one-third of the district's population regularly smoking opium for recreational purposes.[95]

Like district associations, major tongs operated under a federation, the Chee Kong Tong (Chamber of High Justice Society) with headquarters at Spofford Alley. Tongs protected and profited from illegal gambling in establishments around Ross Alley, exploiting the Chinese passion for another addicting activity that was part escape, part solace, and part relaxation. Moreover, they trafficked in commercialized sex, employing young girls and women who were imported for prostitution and placed in upper apartments of houses located at Sullivan and Bartlett Alleys.[96]

While brazen criminal activities and bloody clashes between individual members filled the sensational daily newspapers, the underlying social and political agendas pursued by the tongs remained submerged. By the 1890s, these groups were unquestionably in ascendancy,[97] driven by social unrest because of economic inequalities. Some tong members became skilled in blackmailing wealthy merchants in exchange for protection.[98] Needless to say, such tactics took their toll on Chinatown's legitimate business. Most local attention, however, focused on senseless raids and bloody vendettas between eager fighters from competing gangs, conducted for perceived slights or deeds that terrorized ordinary residents.[99] Ordered executions were often broadcast in advance through printed announcements placed throughout Chinatown, offering large rewards for the murder of a particular person.[100] Tongs and their bloody clashes came to personify racial fears of a "yellow peril."[101]

To cover their crimes and escape justice, tongs supplied San Francisco police officers with generous kickbacks. Assassins were whisked out of town following a killing. Leaders intimidated potential witnesses and fixed judiciary trials through the use of false testimony. Paying high fees, they also regularly kept prominent local attorneys in their employ, including Joseph C. Campbell, one of the most distinguished lawyers of California and partner in the leading law firm of Reddy, Campbell, and Metson.[102] To secure a measure of law and order in the district, the Six Companies attempted to control the tongs, even hiring Chinese detectives and private policemen for protection. The leadership routinely condemned the hostilities, although some of their members were secretly involved. As violence escalated, this publicity periodically forced them to issue proclamations condemning the murders and even to offer generous cash rewards for the apprehension and conviction of the alleged killers, predictably with little success.[103] Yet the responsible "hatchet men" remained shielded from prosecution by a code of silence.

As the Choy Yai (Chinese New Year) celebrations in 1900 ended, a new wave of violence erupted following a dispute that killed several merchants. The local response was a massive police dragnet, as sixty officers led by acting police chief William J. Biggy descended on Chinatown, patrolling streets and looking for the gunmen.[104] The usual instructions were to "gather on the sidewalks and arrest all people looking for trouble."[105] Federal agents joined in the searches and frequently picked up a bounty for spotting illegal aliens for prompt deportation. A temporary truce, hastily negotiated between the warring parties, did little to improve conditions.[106] Gambling dens and brothels remained closed, merchants complained about sluggish sales, and the usual display of fireworks and dragon dances was cancelled.

In spite of rivalries and turmoil, Chinatown's collectivist mentality and sense of harmony endured. Most residents carried out their daily living chores and duties within a uniquely constructed social and cultural matrix, sustained by a degree of xenophobia and nationalistic fervor. Conscious of being descendents of an ancient and venerable civilization, the Chinese expressed ethnic solidarity and idealized the homeland: they considered themselves "natives," villagers with a keen cultural superiority over the part of the world populated by white "barbarians." Those surrounding them in San Francisco were the "foreigners."[107] Assimilation was out of the question. Except for those who took menial service jobs outside the district or ran laundry establishments, distrust, dread, and social distance accentuated this inward focus. For Chinese living in

the surrounding Bay Area and beyond, the district offered a safe place to relax and recover between menial jobs; likewise, it became a particularly favored destination for consultations in the event of sickness.

Although participation in American life was restricted, Chinatown continued to be an integral part of the San Francisco community, producing goods, paying rents and local taxes, and obtaining licenses. The district was "transnational," in daily contact with the surrounding *fan kwei* (foreign devils) through the laundry business, imports and manufacturing, domestic services, restaurants, and vice.[108] Admiration for western technology prompted the use of local telephone and telegraph facilities. Business and service exchanges allowed Chinese to develop a certain degree of understanding of American culture and learn the rudiments of the English language. Another source for contacts was tourism. Through colorful narratives, locals, journalists, and even physicians exaggerated the foreignness, romanticism, and evil of Chinatown.[109]

Given its exoticism, the place attracted mostly nocturnal visitors eager to taste Chinatown's forbidden pleasures of sex and recreational drugs. Since the 1870s, however, the relations between the Chinese and the great population of San Francisco had been hampered by racist anti-Chinese labor rants and a failed attempt to burn down the entire precinct. Local ordinances and the 1882 Exclusion Act further encouraged this divide. Indifference, mistrust, and race prejudice increased; integration was rebuffed by both parties. Converted into a veritable prison, Wong's urban slum remained isolated and marginalized. At the end of February 1900, a shooting during a banquet triggered a new round of gang warfare in Chinatown.[110] A few days later, police chief William P. Sullivan Jr. issued a terse ultimatum, warning that if matters continued, "I would start an agitation and have all of the Chinese driven out of the country."[111] The blunt threat caused consternation in Chinatown's ruling circles and spread terror among the population.[112] Unhappy with an American society they did not understand and trust, everybody was aware that harmony, good fortune, and health remained in the hands of powerful gods. Residents considered themselves victims of China's imperial decline and local racism. Lamented one migrant: "toiling in pain, east and west, all in vain; what can a person do with a life full of mishap? My belly is full of frustration and grievance; when life is at low ebb, I suffer dearly."[113]

Guarding Life and the Way of Death

> Chinese households with sick people resort to divination to find the guilty evil spirit; one needs to stretch the imagination to think that people who live in a cosmopolitan city away from China still embrace such preposterously absurd ideas.
>
> —PROCLAMATION, SAN FRANCISCO CHINESE SIX COMPANIES (1900)

Wong's Illness and Folk Religion

Joyous New Year celebrations marking the arrival of 1900 failed to cheer Wong Chut King, in spite of the monotonous and ear-piercing sound resembling the "grinding of sleepless teeth" created by the Pan Ching Wo pipers on Portsmouth Square.[1] For months, he had felt indisposed and frightened by the specter of illness, a sign of disharmony and divine displeasure. For the Chinese, the blessings of good fortune were fickle; they remained largely in the hands of a supernatural bureaucracy capable of inflicting swift punishments for past and current transgressions. During the late Qing dynasty, when immigrants like Wong headed for California, they brought with them a popular and elaborate system of beliefs, symbols, and rituals constructed over millennia. This folk religion guided their daily lives and reinforced their Chinese identity.[2] Their cosmos was inhabited by the living and the dead, firmly bound together in a cyclical flux.

The Chinese universe was conceived as a three-layered space with an upper *yang* world of heaven (*tian*), populated by gods and ancestors, a crowded middle

earthly domain (*yang jian*) where the living and gods interacted, and an underworld (*yin jian*) populated by ghosts and devils.[3] Each region was hierarchically structured and considered a mirror image of traditional Chinese society, organized into an imperial court and state bureaucracies with magistrates, secretaries, and attendants.[4] Instead of a centralized religious dogma, fluid relationships between these spheres generated a complicated set of beliefs and rites.[5] In China, "religion" remained a complex web representing philosophical schools, or Three Teachings (*san jiao*), namely Confucianism, Daoism, and Buddhism. All had been intimately entwined since the Song dynasty (960–1279) and pervaded all aspects of Chinese life, including imperial ideology and rule.[6]

Among key beliefs was the constant struggle between the yang forces of life and the yin forces of darkness.[7] The yang forces were benign gods and demigods living in heaven, capable of delivering punishments as well as providing protection and good luck. Their evil, malevolent counterparts of the underworld, ghosts or demons, lived in darkness and were held responsible for most human misfortunes, including sickness and death.[8] Given such a dynamic scenario, Chinatown residents constantly sought to protect themselves from all possible harm by appealing to the forces of benevolence and keeping at bay those capable of causing harm. Avoiding divine punishment and rebuffing underworld creatures was a perennial struggle, accomplished through a series of rituals. Such cults and rites had regional or local roots and significance.[9]

As in other cultures, religion brought hope and meaning to the lives of believers. A popular Cantonese expression, "if you worship your gods more often, they will certainly bless you in return," suggested the need to include sacred elements in daily routines to achieve cosmic resonance. Gods (*shen*) and "saints"—deified individuals—were not transcendent creators of the world; their restricted powers only allowed for limited interventions. Many accomplished great feats, became famous mythological figures, or achieved a higher status endowed with magical powers.[10] Others were associated with natural objects such as stars and mountains; some came to be intimately involved in everyday events, protecting key human objects such as doors and stoves. Like humans, these deities could express emotions; jealous of their prerogatives, they expressed anger with petitioners who violated moral rules. Gods were also capable of inflicting severe punishments, including sickness and death. Repentance and devotion to Confucian principles and religious beliefs was essential.[11]

Popular cults featured a pantheon of deified saints of local or regional significance. Their special task in Chinatown and elsewhere was to manage the

daily life of the residents, just as the emperor administered China's civil and political affairs. In fact, gods often behaved like government officials by replying to requests in imperial form—edicts. Many functioned as mediators for petitioners and advocated before other divine judges. Their advice or opinion was sought for all of life's decisions, including the exorcism of evil spirits and cure of diseases. Dressed as government officials or warriors, their statues and images displayed stern, haughty, and imperious expressions. Well known and widely revered throughout China was a Daoist god of war and martial arts, Guan Yu, often known in Cantonese as Kwan Tai.[12] The red-faced, fierce-looking, bearded warrior from the Three Kingdoms period (220–265) was widely celebrated for his military skills, power, courage, bravery, and success. Worship of this god was particularly popular among Cantonese immigrating to America, and his gilded statues and images on tapestries appeared in numerous places of public worship throughout Chinatown.[13] Residents admired his role as peacemaker and protector, bringing good fortune. Although often a dispenser of divine punishments, Kwan Tai was also known for his prowess in casting out disease-bearing demons. His "World-Awakening Prayer" asked petitioners to believe in the gods, put the souls of ancestors at peace, respect their spouses, and avoid all kinds of sins.[14]

Chinatown residents also believed in the existence of divine ministries of health and epidemics charged with tracking the forces of evil.[15] Popular notions explained epidemics as punishment from angry gods. Among them was Shou Xing, god of longevity, health, and long life, portrayed as an old man with a walking stick in his right hand and a peach in his left. The other was Kum Fa, the "Golden Flower Lady," originally a native Cantonese from the Ming dynasty (1368–1644) who now took care of the sick in heaven. Women particularly worshiped her as guardian of fertility, pregnancy, and children, but she also took care of smallpox victims.[16] The Chinese in America were also keen to seek the advice of Wah Tong (Hua Tua), originally a famous bonesetter who became a legendary god of health and medicine.[17]

Almost as popular among ordinary Chinese people was the Daoist divinity Guanyin, known in the West as the Goddess of Mercy and Compassion. This goddess was also known as Guanshiyin—literally "Looking into People's Eyes." After the introduction of Buddhism, she assumed the status of bodhisattva, someone "on the path to enlightenment." Guanyin epitomized the feminine qualities of love, compassion, and care; she was widely worshipped as a champion of the poor, sick, and disabled. Her protection extended from women to workers, craftsmen,

merchants, and especially sailors. She was often depicted as a woman dressed in a white flowing robe, her right hand holding a jar of water while the left sported a willow branch. Other sculptures portrayed her as holding a child in her arms, in reference to her desire to protect mothers and children.[18]

Disease outbreaks were inevitable and divine will inscrutable. To obtain advice through divination, residents tossed burning pieces of paper into a small sandpit, interpreting their charred shapes as divine messages and prescriptions. Demonology retained its preeminence in the causality of disease, and traditional magical and religious practices offered protection against a host of goblins, ghosts, and devils lurking in the dark.[19] Since prehistoric times, Chinese people wore protective amulets, placed prayer papers on doors, burned incense, or conducted exorcisms to prevent or expel these evil spirits.[20] But resignation was commonplace: "soon we will be in another world where people live, hope, suffer in a far different way."[21]

While home shrines remained at the center of Chinese worship in America, deities were frequently venerated in larger public ancestral halls (*miu*), sponsored by clans and benevolent district associations. Chinatown featured more than a dozen such establishments.[22] These "joss houses"[23] differed from Daoist sanctuaries and Buddhist monasteries; each "temple," located on the top floor of an ordinary building and thus closest to heaven, was sumptuously outfitted with hand-carved and gilded furniture, scrolls, silk curtains, and silver and gold ornaments, as well as altars, statues, scrolls, and tapestries depicting divine images.[24] Enveloped in a heavy atmosphere of sandalwood incense, the dark places, illuminated by glass oil lanterns, were ideal for meditation and silent prayer. The oldest was the Tin How temple sponsored by the Sam Yup Association in 1853. Dedicated to Tien Hau (Mazu), this shrine, located on the third floor of a house on 125 Waverly Place (aptly called "Queen of Heaven Street"), featured a main altar with her image along with those of Kwan Tai and Kum Fa.[25] Featuring an altar with a statue of Kwan Tai imported from China, the Kong Chow Association built its own ancestral hall in 1854 at the headquarters.[26] Later, the home of the Ning Yung Benevolent Association added a similar "temple" joss devoted to this god. In California, joss houses became valuable sites for the congregation of newly arrived bachelors, anxious to participate in communal religious celebrations and rituals.[27] Threatened by sickness, Wong may have placed sticks of incense placed in copper braziers, together with propitiatory wine and food offerings to gain favor with important deities.[28] Others placed distorting mirrors or images of demons on their doors to ward off invasions from harmful ghosts.[29]

Religion not only regulated and organized daily life, it also shaped the yearly calendar of the Chinese community through celebrations. Feasts to honor the gods were lavish affairs with food distributions to the needy, lasting for several days.[30] The Ning Yung Association spent large sums of money staging periodic festivals attended by most of Chinatown's population.[31] Familiar and noisy Taishanese and Cantonese conversation permeated the air; revellers periodically rang gongs and clashed cymbals to drive away evil spirits. Both gods and ghosts needed to be constantly propitiated. Whether loved or shunned, ghosts were an essential part of Chinese life, linking past with present and future, ensuring succession and continuity.[32] Feasts were designed to extol or bribe them with a variety of offerings. Their cyclical nature reaffirmed family relationships and cultural inclusion.[33] The Chinese New Year was the most important event of the year. Among the gods worshipped during this two-week festival was Choy Bok Sing Quan (Cai Shen), the god of prosperity. Originally a historical military figure, this deity was included in Daoist and Buddhist celebrations and endowed with magical powers to ward off thunder and lightning and also to ensure the profitability of commercial transactions.

Besides regularly worshipping their favorite deities, Chinatown residents consulted the *Tung Shing* (*Tong shu*), the "Everything Book," a guide for daily living popular in Guangdong province. It listed auspicious days and hours and furnished advice and protection based on astrological and feng shui principles.[34] The texts also proffered suggestions for pleading to and worshipping particular deities and, when someone was ill, determining the nature of a transgression. Another option was to consult a skillful fortune-teller who could identify the demonic source of personal problems.[35]

Cultivating Vitality

Magical spells and rituals aligned with empirical measures to preserve wellness and ensure long life. Chinatown residents like Wong Chut King adhered to traditional health beliefs and practices variously known as "nurturing or cultivating vitality" (*yang shen*) or "preserving or guarding life" (*wei sheng*).[36] Since the body was a gift bestowed by parents, Confucian principles demanded its protection from harm to enhance reproduction and preserve the family lineage. Inspired by Daoist and Buddhist ideas, nurturing life was not only directed toward disciplining the flesh but also designed to balance the emotions and achieve mental harmony.[37] Based on actions of the cosmic force *qi*, operating within the

yin-yang framework, vitality rested on correspondences between six qualities and five cyclical organic processes.[38] Rules for cultivating bodily vigor encompassed diet, exercise, sexual activity, and the ingestion of medicines, all involved in preventing as well as curing illness. The ultimate purpose was to sustain good health in the face of life's strains and vicissitudes, avoiding premature energy depletions through following a moderate lifestyle.[39]

Following Daoist notions, the human body was a representation of the celestial cosmos; both shared parallel structures and harmonious relationships. Location and timing were important to the Chinese because well-being was closely dependent on natural settings and seasonal fluctuations. Both climate and soil shaped the nature of qi and were responsible for bodily constitution and cultural differences. Excesses such as wind, cold, fire, heat, and dampness influenced the body's interior qi. As human diversity was primarily ecological and subsequently cultural, leading medical theorists eventually elaborated a basic division of bodies: robust northern and delicate southern Chinese. Because Guangdong province—home of most migrants traveling to America—was located in a subtropical region of China, the predominant view was that those living there exhibited soft and weak flesh. To explain such geographical differences, Chinese postulated the existence of an external, regional qi shaping both environment and inhabitants as well as defining a particular spectrum of diseases. Such notions reflected awareness of local variety and ethnic differences in late-nineteenth-century China.[40]

A proper "ingestion regimen" was essential to good health. Eating in moderation and selectively choosing among grains, vegetables, fruits, and meats according to their five qualities and five flavors were critical for maintaining a proper balance. Since each flavor exhibited a preference for a particular functional bodily system, the dispersal of qi obtained from food required appropriate choices. Among key recipients were the energy-producing heart, food-absorbing liver, nourishing and building spleen, lubricating lungs, and excreting kidneys. Qi circulated in regular cycles connecting inner and outer organs, moving naturally downward, although its flow could be reversed by meditation. To insure the proper circulation of qi in the body, the Chinese devised a series of breathing methods, exercises, postures, and massage and meditation techniques. The goal was to properly route qi's flow through the multiple tracts and channels, invigorating the body and avoiding harmful stagnations and blockages that could cause disease. Qi's yin component was the material blood, essential for nourishment and growth, flowing in vessels. Its yang was an invisible energy distributed

through meridian channels, stimulating all bodily reactions, emotions, and transformations. For males, a special set of wei sheng practices sought to preserve their seminal essence (*jing*), awarded before birth and not subject to replenishment. To avoid premature depletion and sterility, rules called for sexual restraint and moderation and careful management of ejaculations.[41]

In the quest for enhancing the body's vitality, drugs were critical to maintaining health and curing illness. Prophylactic medicines included a wide spectrum of remedies, including roots, herbs, and animal and mineral products. Within this self-help continuum, many Chinese extended their culinary and herbal mixtures to alleviate symptoms of illness. Arrivals to California already possessed a basic knowledge of such herbs; many immigrants carried satchels with favorites mixtures tucked away in their luggage. Others, equipped with recipe books, visited herbal shops—profusely scattered around Chinatown—seeking advice and making purchases.[42] Wong may have resorted to such self-medication, drinking teas and popular tonics easily available from local shops.[43] These substances were frequently bundled together and mixed according to ancient recipes based on the theories of qualities and flavors. Elixirs and cure-alls with exotic ingredients became immensely popular in Chinatown,[44] turning many residents into individuals obsessed with diets, exercise, and consumption of herbal supplements.

When self-help failed or conditions worsened, consulting local medical practitioners was the next option.[45] In early February 1900, after a three-day bout of fever, generalized bodily aches, and especially painful urination, a concerned Wong finally decided to consult Ching Bu Bing, one of many Chinese physicians practicing in the district. Most claimed to represent a long line of skillful doctors who had practiced a venerable and ethical art that was already flourishing when Europe was in the dark ages. No Chinatown physician belonged to the small elite of hereditary scholars (*shang gong*) associated with the imperial court. Instead, the district was serviced by lower status, apprenticed healers (*zhong gong* or *xiansheng*), who were somewhat acquainted with Chinese philosophical and medical texts.

Lack of educational requirements and legal credentials in China allowed migrant healers to construct their own unique professional pedigrees to awe prospective patients.[46] In San Francisco, Zhao Gong Tan claimed to be a Yin Yang Confucian practitioner versed in the classic principles of medicine.[47] Zhu Xi, an "excellent doctor," turned out to be a recently arrived Buddhist master performing miraculous cures.[48] None possessed a California license to practice legally

Medical consultation in herbal shop, Chinatown, ca. 1900.
Photograph by Charles C. Pierce. California Historical Society Collection at the University of Southern California. Title Insurance and Trust / C. C. Pierce Photography Collection, CHS-2529.

in San Francisco, and they were thus prevented from issuing death certificates. In fact, immigrations authorities often classified Chinese practitioners among the laboring migrants excluded from entering the country after 1882. In spite of such obstacles, several physicians acquired sufficient professional status to attract a large non-Chinese clientele, appearing in city directories and advertising in newspapers. All essentially trusted their memory and intuition; none felt allegiance to particular ancient texts. Classics from the Han dynasty (206 BCE–220 CE) such as the *Neijing suwen* (Inner Canon of the Yellow Emperor) and Zhang Zhonjing's clinical *Treatise on Cold Damage* established basic doctrines, but these and later writings were primarily meant to offer explanations for organizing medical therapy.[49]

Throughout millennia, Chinese medicine never achieved a unified theory and practice. In contrast to Western analytic and reductive approaches to disease, the Chinese, as in all other matters, retained their holistic view. Eschewing abstractions, they employed a different cognitive model of induction and synthesis based on sensory perceptions of sickness. This effort led to the establishment of a complex but systematic framework of correspondences between a wide

range of phenomena, particularly symptoms and signs capable of explaining the reality of human suffering. No phenomenon was ever considered in isolation.[50] Like religion, Chinese medicine remained a dynamic synthesis that incorporated key cosmic philosophical notions such as yin and yang with folk traditions to explain the workings and failings of the human microcosm. For this purpose, the body's economy was modeled after an agrarian scheme conceived of as possessing elaborate irrigation and transportation systems—vessels and channels—equipped with grain storage facilities—key internal organs—all subject to the cyclical and balanced flow of the cosmic vital principle.[51]

Confronted with new diseases over the centuries—many turning into deadly epidemics—Chinese medical practitioners supplemented classical texts with additional explanations and treatments.[52] By the eighteenth century, in a departure from the Cold Damage tradition, the Chinese scholar Wu Youxing articulated the Warm Factor doctrine, suggesting that sickness could be caused by a warm pestilential qi shaped by atmospheric vapors that upset the body's internal harmony. Entering through the mouth, nose, or skin, this qi triggered fevers and damaged the human organism through internal blockages.[53] By the late nineteenth century, Western ideas concerning the presence of specific diseases such as smallpox, syphilis, and plague influenced the traditional Chinese medical system. But, here again, the Chinese went back to causal environmental explanations, blaming specific poisons or vapors as agents for these ailments. In his treatise *A Compilation on Plague,* Wu Xuachong from Guangdong province postulated in 1901 that plague was caused by a poisonous qi rising from the ground, first affecting rat burrows and then humans in dark and poorly ventilated ground floors.[54]

Essentially, the Chinese medical tradition viewed all manifestations of illnesses as imbalances of qi within the yin-yang polarity. At birth, each person was endowed with a finite amount of this vital principle; it could be diverted, stored, and depleted in any of the five key bodily depots, or simply blocked during its passage through the circulatory system. While Western medicine defined the existence of specific diseases employing distinctive symptoms and signs, Chinese medicine sought to detect personalized patterns of bodily dysfunction and then determine the spatial location of imbalances and deficiencies. These unique profiles of disharmony were based on the patient's particular environment, background, habits, occupation, appearance, and mental state. Healers ultimately arrived at functional and temporary diagnoses through subjective inferences derived from a meticulous clinical history, personal observation, and pulse readings.[55]

Like many Chinese healers at home and abroad, Ching Bu Bing would probably have followed the traditional diagnostic "Four Examinations" (*si jian*) that included direct observation of the face, tongue, skin, eyes, and posture (*shen*); listening and smelling (*sheng*); questioning about background (*gong*); and touching body and pulse (*qiao*).[56] The "gaze" included a reading of the patient's facial expressions and skin color, considered critical for matching the five basic colors with the five cosmic depots or functional bodily phases that could determine the course of an illness.[57] Since each yin and yang depot possessed its own pulse, individual readings offered opportunities to detect the state of qi circulation.[58]

Based on later reports, Ching Bu Bing suspected a problem in Wong's bladder (*pang guang*), a yang organ charged with the transport and elimination of human wastes. Excessive dampness was sinking toward the patient's lower body. Perhaps anger or other emotional factors had contributed to the disharmony.[59] Such a disturbance could be detected if the healer's index finger pressed the wrist of the patient. Correlated with other specific bodily signs, a floating, wiry, and rapid pulse would have confirmed for Ching that Wong exhibited a pattern of bladder disharmony with excess fluid and heat. The therapeutic goal was to restore the patient's yin-yang balance through stimulation and regulation of bodily qi flow. Wong's illness would have required food and herbs, based on combinations of flavors and temperatures tailored to the patient's specific needs.[60] With fevers and inflammations, hot foods and alcoholic drinks were prohibited; these conditions required cooling, achieved through the consumption of teas brewed from a mixture of bitter, draining, drying, and cooling herbs.[61] In addition, practitioners often recommended qigong (working with qi) exercises—a set of breathing and meditation practices rooted in Daoist and Buddhist belief and designed to strengthen the circulation of this vital principle. Another option was acupuncture, a somewhat esoteric practice that sought to achieve similar results through the insertion of silver needles at selected points along the route of specific yang channels of the meridian transportation system.

Late in February, lack of relief and foul-smelling urinary discharges prompted Wong to seek a second medical opinion, a common practice. Suspecting a venereal disease, he consulted a clansman and prominent practitioner, Wong Woo, located at 766 Clay Street. This Chinese physician regularly advertised in local newspapers such as the *San Francisco Chronicle*, always claiming that he could cure all diseases with Chinese herbs.[62] At this point, Wong began to complain about the appearance of a painful lump in the right groin area, accompanied by inability to move his leg. According to a Cantonese expression, he was "growing

a mango," also known in China as venereal "plum boil."[63] This swelling was common among lonely bachelors who visited the "Green Mansions," or brothels, having sex with "hundred-men's wives," the Chinese term for prostitutes. After an examination, Wong Woo diagnosed a further disharmony: the descent and condensation of the damp heat that now caused circulatory obstructions responsible for the lump and urinary discharges. Like most Chinese healers, he would have been reluctant to perform a surgical incision because such an intervention could only further alter the current web of bodily balances. Instead of draining the lesion, Wong Woo may have recommended salty foods and cooling herbs capable of draining bodily fluids that would eventually dissolve the lump. Besides herbs, Wong's condition called for the application of a plaster, a dressing designed to soothe the local pain and inflammation. Use of traditional counter-irritation techniques, including cupping glasses, poultices, and skin scarifications, was common in Chinese medicine. Plasters made from thin paper or cloth were often soaked in opium and applied to wounds and swellings. For fevers, the Hock San treatment consisted of rubbing red or black ointment between the eyebrows and onto the chest and lower sternum.[64]

For Wong, ashamed and frightened, the medical verdict represented a loss of face (*shi lian*). Womanizing was considered a vice. In a strict Confucian sense, illicit sex was also considered an unfilial act that betrayed a man's family duties and obligations.[65] Chinese males were always concerned with spending too much of their finite jing, or seminal essence, for fear of compromising their procreative powers and, more importantly, affecting their general health. Excessive sex could lead to debility and premature death. Because of his absence from China, Wong was already failing to provide offspring and thus perpetuate his ancestral lineage. Yet, among Wong's "married but single" peers, his conduct would be easily forgiven, but religious beliefs suggested that the indiscretion would be recorded by the stove god Zao Shen, who ruled over all domestic life and reported to the eight magistrates in charge of underworld "hells" for eventual punishment.

Shelters and Dispensaries

As he hid in his basement cubicle at the Globe Hotel, Wong's condition deteriorated. Subsequent information suggested that he started suffering from high fever, vomiting, and diarrhea. Self-help and medical advice had failed to stem the suffering. Was he willing to accept his ultimate fate with patience and for-

titude? It was too late for a return to China. Cantonese had a special aversion to death: as the end approached, those nearby became scared of being tainted and usually fled from the sickbed or transported the dying elsewhere.[66] Such behavior was abhorrent to most Americans. Writing a decade earlier, one observer noted: "Ill fares the coolie that falls sick in Chinatown . . . medical attendance or proper care he will get none. Slow starvation in a noisome cellar, in the horror of thick darkness, with vermin swarming over the helpless sufferer—such is the fate that has befallen many a poor creature in Chinatown."[67]

According to the Chinese press, Wong, now near death, was transferred from his cubicle in the Globe Hotel cellar by roommates and taken to undertaker Wing Sun's Sau Pan Po, or "Everlasting Procreation and Long Life Coffin Shop," two and a half blocks from the hotel.[68] Chinese funeral homes sponsored rooms for gravely ill, moribund individuals. Called "halls of tranquility," these separate facilities allowed the dying to spend their last hours or days resting in small cubicles, often next to open coffins and the unburied dead.[69] Such removal was risky. Since early February, acting police chief William J. Biggy, deeply involved in tracking down murderous gangs in Chinatown, also came to investigate the district's coffin shops, warning owners that he would no longer allow them to house very sick people. This action had been triggered by the death of another Chinese, identified by a patrolman, who earlier had been carried alive into this establishment. Biggy threatened to arrest anyone bringing dying persons or accepting them on the premises.[70]

Sponsored by wealthy merchants, private benevolent societies in leading Chinese cities during the late Qing dynasty established shelters and public dispensaries offering medical advice and providing medicines. In San Francisco, Chinatown bachelors who were unwell and unable to work also sought shelter or were brought to "rooms of perpetual peace" furnished by some benevolent associations.[71] Among the first was the Kong Chow "asylum" for Chinese arriving from four districts in China. The Six Companies sponsored its own "Hall of Great Peace."[72] Provided with provisions and herbal remedies from clansmen and friends, sufferers were expected to rest or die in these "little hospitals."[73]

By the 1860s, foreign missionary dispensaries and hospitals in China supplemented native philanthropic efforts in selected regions and ports as part of a growing campaign to introduce Christianity into China.[74] After returning to San Francisco in 1852, the Reverend William Speer, a Presbyterian medical missionary, opened his own free dispensary in Chinatown. With the help of two Western physicians, Speer attended mostly arriving Chinese trying to recover

from deprivations suffered during the long voyage across the Pacific. Encouraged by his dispensary's success, Speer pleaded with the California authorities in 1854 to divert taxes paid by the arriving migrants toward the establishment of a new hospital, but the proposal failed to be enacted.[75] In a world convinced that crowded slums bred disease, sanitarians would not allow the creation of a hospital in Chinatown. Only locations exposed to fresh air, ample sunshine, and little noise were acceptable.

By the 1870s, San Francisco newspapers were urging leading Chinese merchants to follow the example of Hong Kong and Macao and establish a hospital in Chinatown. A committee of prominent Chinese businessmen living in the British colony had founded the Tung Wah Hospital in 1869 to counteract negative publicity about conditions prevailing in local "dying chambers." The Hong Kong institution was designed as a shelter for the relief and protection of ill or homeless individuals preparing to emigrate abroad. Operating without Western interference, the hospital functioned according to Chinese medical principles, with native practitioners dispensing traditional remedies.[76] Across the Pacific, the San Francisco City and County Hospital seldom accepted Chinese patients because of racially motivated dread that they would contaminate "civilized" citizens with their loathsome diseases.[77] Those afflicted with smallpox, leprosy, and syphilis were herded into a special municipal isolation facility: the dreaded San Francisco "pesthouse" located at the fringes of the city. Injuries, including gunshot wounds, were referred to the Receiving Hospital near the waterfront for emergency care. To be sure, most Chinatown residents already distrusted Western healthcare facilities; in their view the "foreigners" provided mostly polluting "death bed" care.[78] Rumors circulated that the municipal wards harbored devils capable of killing Chinese patients.[79] Instead, ordinary Chinese preferred their "tranquility chambers," although sanitary surveys and neighboring districts blamed them for periodic outbreaks of diphtheria and typhoid fever.[80] They remained "nuisances," subjected to fines and prosecution by the local health officer.[81]

During a smallpox epidemic in 1888, the Chinese consul general in San Francisco suggested establishing their own isolation facility on the outskirts of the city. Planners designed a building for housing disfigured lepers and smallpox victims as well as people with advanced cases of syphilis, all currently living under dreadful conditions in Chinatown or confined in the city's pesthouse.[82] The aim was to improve the collective image of the quarter since their visible presence fueled the Western perception of Chinese physical and moral taint.[83]

In spite of support and funding from a broad coalition of Chinese diplomats and merchants, location, patient population, and staff arrangements doomed the project.[84] Nobody wanted a lazaretto in the neighborhood. Moreover, the health authorities objected to the planned presence of an all-Chinese caregiving staff.

By 1896, new exposés in the press about the despicable "chambers" in Chinatown had further inflamed public revulsion.[85] Local Protestant missions responded, offering to rent a suitable house and hire Western physicians who would dispense free medical services.[86] When this effort failed, disappointed church officials pressed for lifting the ban on Chinese admissions to the City and County Hospital.[87] That proposal immediately faced angry protests from current inmates. Racist San Franciscans panicked at the thought of an Asiatic "invasion" and refused to share space in the wards with disgusting Chinese patients.[88]

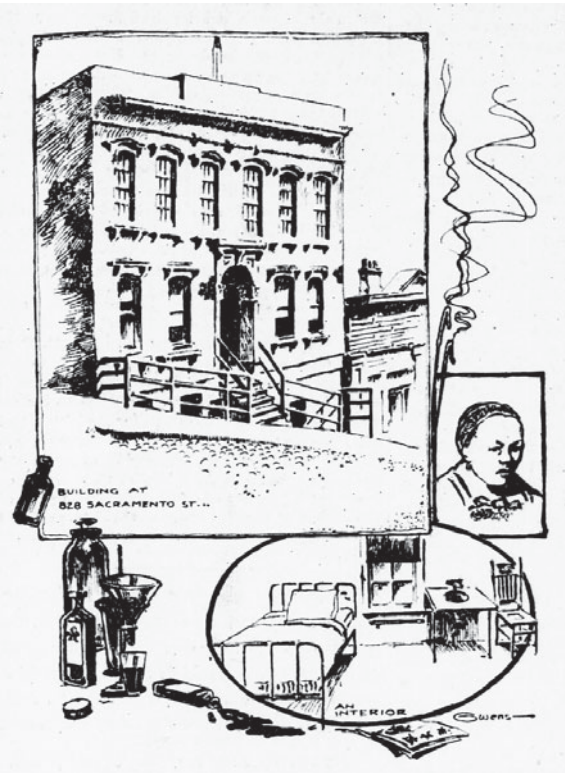
Three years later, two men familiar with American missionary hospitals in China, John Fryer and Boudinot C. Atterbury, made another attempt to establish a Chinese hospital.[89] Fryer was the first Agassiz Professor of Oriental Languages at the University of California.[90] Atterbury was already conducting a free clinic for indigent Chinatown patients.[91] With the support of the Chinese consul general, Ho Yow, and leaders from the Six Companies, the plan called for the establishment of a philanthropic, nonsectarian institution that would replace the current "chambers of tranquility."[92] Ho reassured its sponsors that "the Chinese are very glad, and the most intelligent will do all in their power to aid it. There is practically no opposition to the idea."[93] Fryer sought to launch this Chinese institution along the lines of typical private, voluntary American hospitals managed by an executive board composed of local philanthropists and bank officials. Ho would head a Chinese committee, charged with fundraising among elite Chinatown merchants through subscriptions and endowments.[94] The project envisioned a medical staff exclusively composed of licensed American practitioners. Although legally incorporated and financially viable, Fryer's plan triggered protests from neighboring property owners[95] and failed to gain acceptance from ordinary Chinese residents.[96]

In mid-February 1900, Ho proudly announced the imminent opening of a free medical dispensary in Chinatown.[97] The creation of the Tung Wah (Donghua, or East China) Dispensary was portrayed as an expression of traditional Chinese benevolence and calculated to improve the district's image.[98] Major contributors included the Chinese diplomats, district associations, and prominent businessmen and merchants.[99] Several Western physicians promised their assistance; herbal shop merchants would provide medicines free of charge. The

Tung Wah name represented a clever strategy to make the new establishment more palatable for ordinary Chinatown residents. Many had used Hong Kong's Tung Wah Hospital for shelter and medical assistance before heading for America. Those living in California still depended on this institution as the central distribution point for mail and telegraph contacts with relatives in South China.[100] Leading Chinese sponsors expected that workers would perceive the provision of free medical care as a beneficial alternative to self-care or solitary banishment in deadly chambers. As China's representative, it was the consul's duty to protect and manage all local Chinese subjects, ensuring their loyalty to the empire.[101] Founding the Tung Wah Dispensary was designed to provide an important service while reasserting a measure of control over an increasingly unruly population.

Both Minister Wu Tingfang and Consul Ho were also committed to an agenda for modernizing China focused primarily on the introduction of Western ideas and technologies.[102] Their hope was that the Tung Wah Dispensary would lead to a wider adoption of Western medical practices based on scientific principles. Ho's older brother, a Western-trained physician and lawyer, had already played a key role in founding Hong Kong's Alice Memorial Hospital under the auspices of the London Missionary Society.[103] "The Chinese have witnessed the benefits of western science and are glad of the opportunity to receive its benefits," Ho asserted. In speeches and interviews, the consul made no bones about his disdain for brutish and superstitious old-fashioned Chinese: "those who are too ignorant to accept the western method of treatment will simply ignore the hospital."[104]

The Tung Wah Dispensary officially opened on March 3, 1900, an astrologically auspicious day.[105] Like missionary hospitals in China, it was conceived as a small community institution initially treating ambulatory patients with a few beds set aside for emergencies. The dispensary featured a reception area, several consultation rooms, a small laboratory, and space for minor surgical procedures. Like its homeland predecessor, it featured an all-Chinese board of directors and medical staff composed of seven well-known Chinese practitioners plus a few Western physicians, most of them with links to local Christian missionary churches.[106] To comply with California law and facilitate contacts with San Francisco's medical establishment, George L. Fitch, a licensed physician and surgeon specializing in sexually transmitted diseases, was placed in charge.[107] Assisting him were Atterbury and Ernest A. Sturge, both returning missionaries.[108] Others included Gardner P. Pond, who looked after patients suffering from eye diseases,[109] and Minnie G. Worley, who specialized in pediatrics, gynecology, and



Drawing of the Tung Wah or Oriental Dispensary at 828 Sacramento Street, depicting building, sickroom, attendant, and remedies.
San Francisco Call, March 3, 1900.

obstetrics. The presence of physicians with experience in treating Chinese patients promised empathy, yet missionaries often were patronizing and condescending in their dealings with Chinese patients.[110] In charge of the Chinese medical staff was Tom Wai Tong, a highly credentialed practitioner affiliated with a local drugstore, who combined Western and Chinese treatments.[111] Other members were Mark Qiao Ying, in charge of pediatrics, ophthalmology, and laryngology, Ng Toy Kee, a popular herbalist, and Wu Kay Jing, claiming to specialize in venereal diseases.

Although the Tung Wah Dispensary focused on outpatient care, all Chinese with curable and incurable conditions were welcomed to consult without appointments. Given its limited space and budget, only poor Chinatown residents

qualified for free care. On arrival, patients would be given a choice of clinics and attending physicians. In China, the accepted wisdom was that "foreign devils" with their surgical instruments and antiseptics were definitely better at dealing with acute and "external" (*waike*) problems, notably trauma and infections, including fractures, lacerations, and abscesses. They also were better at managing frequent eye troubles—cataracts and trachoma. In turn, Chinese doctors successfully treated "internal" (*neike*) conditions with traditional herbal remedies. For those too sick to come to the clinic, Ho promised to send a staff doctor to visit them at their homes. Tung Wah's first patients arrived on March 7, 1900, too late for the ailing Wong Chut King.

Corpses and Bones

Indeed, Wong apparently had died the day before, in the afternoon.[112] For Chinese migrants, perishing in an undertaker's establishment promised a proper funeral and eventual retrieval of their bones for shipment to the homeland; final burial took place near their ancestors in China.[113] Since the Bronze Age, ancestor worship in China emphasized the continuity of kinship between the living and the dead. To be remembered, the deceased were buried near the homestead, their names inscribed on tablets kept in homes, shrines, or halls, thus contributing to a family's genealogical continuity. Ancestors demanded to be worshipped, fed, and cared for through daily prayers as well as rituals and sacrifices performed at their gravesites. Like gods, they actively intervened in the affairs of their descendants, granting or ignoring requests and inflicting punishments for moral violations.[114] Based on Confucianism, filial piety constituted a form of repayment for parental care. By honoring ancestors, descendents hoped to support the souls of their departed relatives, facilitating their long journey through underworld courts in greater comfort. Such attentions bestowed by family members also promised to enhance their own lives.[115]

By the late nineteenth and early twentieth centuries, a standardized Chinese "way of death" became central to the creation and maintenance of a unified cultural identity during an era of national uncertainty and personal vulnerability. In all human cultures, death represented a universal human experience to be confronted, described, and provided with meaning.[116] Most Chinese wished for a "normal," predictable demise. According to Daoist beliefs, death was but a moment in a harmonious journey toward immortality. At the center of Chinese death ceremonies was the desire to retain a relationship with the deceased and

thus preserve social continuity.[117] The transition occurred in stages: separation from the living, radical conversion from personhood to corpse and spirit, and final acceptance of the spirit into an extraterrestrial realm fraught with dangers and probable punishments.[118] A "correct" performance of rituals assisted the soul toward its ultimate destination and integration into the celestial bureaucracy.[119] Yearly celebrations, such as the Qingming (Bright and Clear) Festival, usually held in mid-spring, honored and remembered the ancestors who were allowed to leave the underworld and briefly visit with their living relatives. The Chinese paid homage with food offerings, paper money, and libations at their home shrines and in public ancestral halls. They also visited and cleaned the ancestors' gravesites, thus the name "Tomb Sweeping Day."

Following death, contacts with the corpse were to be avoided; the practice of deserting the house in anticipation of or following a death could be traced back to the Han dynasty.[120] Men were believed to be especially susceptible to *sat hei* (killing airs) presumed to escape from the corpse at the moment of death. Killing airs could permeate the room, cling to nearby relatives and friends, and even cause yin-yang imbalances, bad luck, and the appearance of demons. They could even lead to diseases such as leprosy and syphilis. Following death, the primary goal of the Chinese funerary rites was to keep the yang soul and yin corpse together until the community organized a proper and ritualized exit for the soul.[121] Because of the presence of evil spirits attracted by the demise, this was a vulnerable period for everybody. The interval stretched from the moment of death through transport and placement of the corpse into an airtight coffin until its closure with the lid firmly nailed shut.[122] Women and menial laborers usually handled and washed the polluting corpses. In the eyes of the Cantonese, coffin shop owners and workers were social outcasts, permanently tainted by virtue of their repeated exposures to the dead.[123]

During the transport of the coffin to the cemetery and its lowering into the grave, the danger of pollution lessened. In the meantime, the sound of music and constant drumming was expected to keep the soul and corpse together while shunning evil spirits. A "settler," an expert in geomancy, determined the timing and position of the coffin in a grave so that it would be properly aligned according to feng shui principles.[124] Placed in relation to natural laws, the soul would finally feel "comfortable" and exit, a process characterized as "riding the qi."[125] In case of a violent or unpredictable death, loss of physical integrity, or an incomplete funeral, the soul of the deceased was at risk; it could escape prematurely and become lost, ultimately forced to roam as a ghost.[126] Such a

terrifying prospect explained the Chinese abhorrence to Western postmortem dissections.

Following a peaceful burial, the soul was expected to make an uneventful transition, resting and descending to the underworld.[127] Most spirits faced judgments under the rule of Yan Luo, the God of Death, and his ten Magistrates of Hell. Like imperial court officials, these magistrates were empowered to carry out punishments and gruesome tortures for sins committed during the person's lifetime.[128] As in the real world, the Chinese soul was expected to "squeeze" (bribe) clerks to alter the account books listing such sins, thus lightening the punishment and keeping the soul comfortable. To help manipulate the underworld with gifts of money, the living decorated sheets of "spirit or joss paper" made of bamboo or rice, burned them to ashes, and then disposed of them in water.[129] Burning paper money was considered a display of filial piety, providing spirits with the means to purchase earthly comforts and recreate the context of everyday life.[130] Paper replicas of everyday objects, including gold and silver currency, were also burned, in the belief that fire would transform them into enduring objects in the next world where they would become bargaining chips for currying favor with gods, ancestors, and even ghosts.

The underworld was populated by malevolent yin spirits (*gui*) that constituted an invisible but potent supernatural force. Comparable in power to the yang gods, the yin spirits similarly influenced mankind's fortunes. Many were ghosts of former men, neglected or deprived by their next of kin. Hungry and angry, they often returned to earth, haunting or tormenting humans, exacting revenge for the sorrows and injuries they had received. The Hungry Ghost Festival (Zhongyuan Jie) during the seventh lunar month (September–October) was devoted to pacifying and feeding visiting restless spirits. Such demons were believed to be directly or indirectly involved in causing misfortune, failure, illness, and death. Like ancestors, wandering spirits or ghosts were under the protection of Guanyin. For the nourishment of spirits during underworld journeys, Chinatown residents displayed food and presents in their windows and balconies. Processions with music, banners, and displays of godly images were common.

Following a final judgment, the soul eventually rose and crossed the Golden Bridge to the "Pure Land of the West." Located outside the cosmos, this Buddhist nirvana of eternal bliss hosted souls released from the usual cycle of birth and rebirth. Others crossed the Silver Bridge to Heaven, a domain of the cosmos ruled by the Jade Emperor and his court of demigods, ready to await reincarnation.

The Chinese considered the flesh (*yin*) transient, prone to rot, and dangerous, while the bones (*yang*) were durable, still charged with energy and power if carefully scoured of every scrap of flesh. A "clean job"—meaning no flesh remained attached to the bones—required a minimum of three years. Decaying male bones retained and dispersed the body's original yang qi, so they would be preserved and transported.[131] To facilitate such a transfer, Cantonese villagers followed a system of double burial. The first involved a wooden coffin placed in the ground for several years, followed by exhumation, ritual washing of the bones, and storage of the bones in ceramic urns. Later, at an auspicious time and location, these urns were reburied in elaborate horseshoe-shaped tombs, permanent resting places for a village's ancestors.[132]

In America, single migrants came to depend on their clan or district association for preservation and transportation. In San Francisco, the Six Companies and its affiliated benevolent societies assumed this family obligation with the aid of several Chinatown mortuary establishments. Prominent members who died because of accident or sickness could be embalmed, their bodies promptly transported across the Pacific to be reunited with their families and clans. Most others paid a special fee to their huiguan to organize a funeral and temporary burial, followed by exhumation and repatriation of the bones to China. Some associations even created "spirit boxes," silver plates inscribed with the names of deceased members, especially for those Chinese whose corpses had been stolen or whose graves remained unidentified. The tablets were placed near an altar of the society's ancestral hall with a table of offerings surrounded with incense sticks.[133]

Although some migrants eventually came to believe that "the bones can rest almost as well in America as in China,"[134] each association sponsored a benevolent hall (*shantang*) charged with making funeral and burial arrangements, as well as organizing the annually prescribed ceremonies and sacrifices to the dead.[135] Secretaries for the Six Companies kept a chart or "bone book," listing the names of deceased members whose bones had already been collected for their transfer to China. Temporary storage in wooden boxes occurred in vaults placed in funerary establishments or "bone houses" located throughout Chinatown; these frequently attracted the attention of sanitary officials.[136]

Coffin shops became important partners in an enterprise central to the well-being of the entire Chinese community.[137] Besides hosting the dying, they also prepared and dressed the corpse and provided the pine or redwood coffins and

hearse for transportation to the cemetery. Good, solid coffins, also called "long-life boards," were deemed essential for restraining the restless spirit and sometimes were purchased or gifted well in advance of their use. The establishments also organized cleansing rituals for those left behind. Being a universal symbol of purification, fire was employed to dispose of the deceased's possessions, except for money and jewelry that could assist him to pay off the underworld spirits during his journey. Burials were meant to last for a period of about three years before exhumation and repatriation.[138] To ensure that the bones would be safely preserved, the Chinese often failed to report deaths to the local health authorities, simply hiding corpses in joss houses and coffin shops' "tranquility halls," which could cause fetid odors throughout the neighborhood. At times, undertakers or friends secretly buried the dead in vacant lots or plots located outside the city.[139]

Municipal formalities and feng shui considerations determined the auspicious day and place of burial, since there was no prescribed interval between death and interment. The Chinese established their first graveyard at the rear of San Francisco's Lone Mountain Cemetery, but in 1898, by orders of the city health board, all city cemeteries were closed as part of new sanitary ordinances. Alternate facilities came to be located several miles beyond city limits, in San Mateo County, west of the town of Colma. The site was particularly agreeable to the Chinese because the new place, like the previous San Francisco setting, was across a hill and west of Chinatown, in the yin land of the dead. The "Happy Valley," nestled in the hills overlooking San Francisco Bay, provided adequate space, and its configuration seemed to harmonize with feng shui principles.

Chinese funerary practices, especially burial and exhumation practices, violated Western sanitary rules and added to the chorus of complaints against the Chinese. Although San Francisco authorities insisted that bodies be wrapped in shrouds saturated with a disinfectant and placed in hermetically sealed caskets, the Chinese usually wrapped them in canvas. The corpses were placed in rustic pine boxes and buried in shallow, six-inch deep graves to allow rapid decomposition. Such practices led to robberies, with broken-up caskets left strewn around the empty graves. Coffin tops often remained deliberately exposed to the air, with the attendant stench triggering strong protests from nearby residents.

Benevolent hall representatives carefully checked dates of death to calculate decomposition. Individual associations hired laborers—often non-Chinese who were not afraid of ghosts—to dig up the remains, scraping or boiling the remaining flesh. To maximize their yang qualities, the recovery procedure needed to

be meticulous. With the help of charts, not a single piece of bone was allowed to escape. The "resurrectionists" collected them into individual piles, taking care not to mix them up or break them into pieces. Large bones were wrapped in oiled cloth while the smaller ones for each hand and foot found their way into individual bags. Once together, all skeletal remains recovered from a gravesite were placed in sealed zinc-covered boxes for shipment.[140] Most San Franciscans considered such practices revolting, and this contributed to the disgust expressed about the habits and customs of the city's Chinese population.

Usually nearly 1,500 bodies per year were dug up, a significant source of income for the County of San Francisco, which issued the necessary permits. Placed in crates, the bones—characterized as "ghastly Mongolian relics"—were ultimately loaded onto ships for their final journey to China, frequently disguised as "fish bones," to defraud the city of thousands of dollars in additional transfer fees.[141] Before the cargo left port, scraps of red paper and punk sticks were burned at a brief ceremony and the old names scratched from the lists.[142] The bones' destination was the Tung Wah Hospital in Hong Kong. For a small fee, this institution allowed relatives to pick up individual boxes or offered to deliver them to their appropriate Guangdong districts.[143] Reburial in a ceramic urn near the graves of other family members in China closed the circle: another ancestor ready to be honored and celebrated. This final rite followed a popular Chinese proverb: "Fallen leaves return to their roots."[144]

Sanitation, Microbes, and Plague

> [In Chinatown] the state of affairs is such that a wee harmless plague microbe wandering over the earth would at once say: this is the place of my heart; here I will settle down and multiply. Here I will live and die, I and all about me.
>
> — *SAN FRANCISCO EXAMINER* (FEBRUARY 4, 1900)

Issuing Death Certificates

The coffin shop's owner, Wing Sun, summoned San Francisco assistant health officer Frank P. Wilson, a nonsalaried police surgeon, to issue Wong Chut King's death certificate, which was necessary for obtaining a county burial permit. Cultural dissonance and linguistic barriers often complicated such requests. San Francisco health officials were supposed to deny an application if it lacked enough information or if there were doubts about the cause of death. In suspicious cases, the body could be sent to the San Francisco morgue for examination by the city coroner, an act that included an autopsy, which was repugnant to most Chinese residents. Under such circumstances, health officials would sometimes collect "black money" (bribes) for signing the certificates.[1] Wilson was an 1888 graduate from the College of Physicians and Surgeons in New York, specializing in orthopedic surgery; he also volunteered his services at the San Francisco Polyclinic. His official duties involved the investigation and inquiry into all deaths occurring in Chinatown, as unlicensed, non-Western practitioners could not legally issue the necessary documentation. Wilson usually made

his daily rounds of the district's undertakers, collecting a meager fee of three dollars per certificate, paid either by family and friends of the deceased or, more often, by the undertakers themselves. His task was to ascertain a plausible cause of death, but given the frequent lack of witnesses willing to provide information, such a determination was highly speculative. Wilson was good at detecting bullet and knife wounds but less competent at reading signs left by internal ailments. Most diagnoses were based on comments obtained through a translator, followed by cursory body inspections and clinical hunches.[2] His routine had recently drawn the ire of acting police chief William J. Biggy when Wilson was forced not only to acknowledge visiting the funeral homes' "chambers of tranquility" but also to admit that his death certificates were largely based on guesswork.[3]

Historical demography, epidemiology, and past mortality statistics are built on sand. Everything is constantly shifting—the environment, humans, and their illnesses, together with disease classifications and death reporting requirements.[4] Nevertheless, San Francisco's mortuary records between 1895 and 1905 offer a glimpse, albeit imperfect, of the spectrum of diseases considered responsible for deaths in Chinatown. The official information also included age, sex, occupation, and place of death. To extract some meaning from the evidence, a recent statistical study employed an anatomical-clinical framework based on organ systems. Not surprisingly, respiratory ailments were thought to be responsible for almost half (46.6%) of all registered deaths, with pulmonary tuberculosis alone accounting for a third (33.4%) of the entire sample. Besides tuberculosis, Chinese suffered frequently from pneumonia, bronchitis, bronchopneumonia, and asthma. The next most frequent cause of death could be classified as cardiovascular (12.9%), with endocarditis and valvular heart disease listed as the major culprits, although such conditions were difficult to ascertain without postmortem dissection. Gastrointestinal diseases followed (9.1%), with nearly half ascribed to cirrhosis of the liver, gastroenteritis, and peritonitis. Next were the infectious diseases (7.4%), including plague, syphilis, typhoid fever, and diphtheria (in order of frequency). Deaths from renal disease (6.3%) were tallied as nephritis, mostly "interstitial nephritis," and "Bright's disease," both questionable diagnostic labels preferred by Wilson. Less significant were conditions of malnutrition and old age (4.8%), with most specified as senile debility, inanition, beriberi, and marasmus. Trauma (4.5%) comprised gunshot wounds, homicide, and suicide. Finally, the records also revealed a smaller group of cancer deaths (3.6%), with the stomach the most common organ afflicted.[5]

A small number of Chinatown dwellers displayed diseases endemic in Asia and thus of interest to American physicians.[6] Among them were malaria, dysentery, and leprosy. Most immigrants from South China appeared to be immune to malaria, which was also endemic in California's Central Valley.[7] Tapeworms (*Diphyllobothrium latum*), acquired from uncooked fish, were also common. In fact, the *Chinese Western Daily* devoted an entire article to a successful herbal treatment for this ailment. News about the cure quickly spread through the Chinese American community, prompting individuals to request prescriptions.[8] Another common parasitic condition among Chinatown inhabitants was clonorchiasis, acquired through the consumption of uncooked fish infected with cysts from the oriental liver fluke.[9] Since raw fish was a popular delicacy and virtually every freshwater species was capable of serving as an intermediate host, this condition was widespread in China but remained mostly hidden; it was only unveiled during postmortem dissections. The worms caused abdominal discomfort, blockage of pancreatic ducts, and progressive liver cirrhosis and mild jaundice, perhaps contributing to the "yellow" racial designation.[10] A variety of eye diseases, ranging from conjunctivitis and corneal ulcers—often due to gonorrhea—to trachoma and cataracts were common and widespread.[11] Last but not least, Chinese exhibited a number of skin conditions, including syphilitic rashes, scabies, ulcers, eczema, psoriasis, and scrofula.[12] Three diseases with potentially hideous facial skin lesions—leprosy, smallpox, and syphilis—forced Chinese sufferers to hide to avoid detection or expect to be forcefully removed by local health authorities to the municipal isolation facility. Before plague, they were largely responsible for portraying "Mongolians" as weak, sick, and depraved.

In China, the presence of leprosy reached back to early times. It was more common in Yunnan and Guizhou, and to a lesser extent in Guangdong, where medical missionaries estimated the presence of about 10,000 people suffering from milder forms of the disease. In South China, people believed that it was a sexually transmitted ailment, traditionally linked to other mental and congenital diseases. Considered incurable, its stigmatized sufferers were frequently ostracized and abandoned in remote villages and islands.[13] Following the bacteriological identification of its causal agent in 1873, many contemporary Western physicians considered leprosy highly infectious, prompting dire warnings to avoid all contact with Chinese people.[14] Racists in San Francisco painted leprosy as a "disease of semi-civilization," only transmitted between barbarians.[15] In February 1880, the Anti-Chinese Council of the Workingmen's Party deputized

a committee headed by two physicians to inspect Chinatown and issue a report about their findings. Under the title "Chinatown Declared a Nuisance," the inflammatory document characterized leprosy as an "inbred disease of the Chinese infused into our healthy race by the sucking of opium pipes which have been handled by those already afflicted."[16] Some San Francisco health officials speculated that leprosy was a form of congenital syphilis, thus making a linkage to the venereal form of this disease already prevalent in the city. Yet, John P. Young, a prominent San Franciscan, declared that although leprosy was present in Chinatown, it failed to spread among Chinatown residents and was not communicated outside the district.[17] In spite of much "misinformation," San Francisco officials admitted that leprosy was a prime cause for anti-Chinese sentiment in California since the early 1870s.[18]

Like leprosy, smallpox was also endemic in China. During the nineteenth century, Guangdong province experienced yearly epidemics, especially in Guangzhou.[19] The outbreaks occurred between February and June, afflicting crowded city neighborhoods and boat populations. To prevent severe or fatal outcomes of this common "disease of heaven," southern Chinese cities switched from traditional protective inoculation procedures, adopting instead Jenner's cowpox vaccine in the 1860s.[20] Most villagers, however, still practiced the instillation of a powder made from dried smallpox scabs. Instead of conferring immunity, this strategy often triggered full-blown cases of smallpox. Chinese called the disfiguring facial scars "flowers of heaven" and considered them a mark of strength and seasoning. Although local residents found pockmarked Chinese repellent and dangerous,[21] the immunity proved advantageous in California, where the disease was a frequent visitor in new settlements. Introduced into the San Joaquin Valley in 1833, smallpox quickly spread among the Indians and settlers to San Francisco, becoming endemic as far south as Monterrey.[22] To compound the problem, there was no compulsory vaccination in California, and availability of deficient cowpox vaccine obtained from "vaccination farms" only enhanced the population's vulnerability.[23]

Not surprisingly, smallpox epidemics afflicting San Francisco in 1869, 1876, and 1888 were blamed on "treacherous" Chinese, although many of the victims hailed from other areas of the city. Such blanket allegations were largely based on lack of reporting. This was especially true during epidemic outbreaks or when arriving migrants began to display signs of disease following disembarkation. Based on his experience as San Francisco's coroner in the 1870s, the distinguished physician Beverly Cole admitted that he had never witnessed a real epidemic

outbreak in Chinatown in spite of its less-than-desirable sanitary conditions.[24] Failures to report diseases, as well as deliberate efforts to move the infected to different locations in the neighborhood, continuously frustrated city health inspectors and epidemiologists eager to locate victims and quantify epidemic outbreaks. Those afflicted with leprosy and smallpox—never more than ten to twenty people—were quickly herded into the dreaded municipal isolation facility.[25] The specter of such forceful deportations haunted the Chinese and contributed to reporting failures.

Chinatown residents were similarly faulted for the spread of venereal diseases, especially syphilis, introduced to China by the Portuguese during the 1500s and apparently a milder disease in the south of the country. Judging from the number of Chinese physicians specializing in sexually transmitted diseases, the incidence was probably higher in Chinatown's bachelor society. *Bak zok* (white flow) and its complications, suggestive of gonorrhea, were better recognized. Many blamed the spread of syphilis on the flourishing prostitution trade in the district. At a hearing in San Francisco before a Congressional committee on the "Chinese question" during the fall of 1876, Hugh H. Toland, the original founder of the Toland Medical College and at the time a member of the local health board, testified about an alarming incidence of syphilis among local white boys being initiated into the pleasures of the flesh by infected Chinese prostitutes.[26]

While much effort and ink were devoted to visually loathsome diseases, Chinatown's population density and air pollution favored the spread of respiratory diseases, including asthma, bronchitis, and pneumonia. Smoke from poorly ventilated kitchen fires was a significant environmental hazard, compounded by the popularity of cigar and opium smoking among the Chinese. A distinguished visitor to San Francisco, the scholar and reformer Liang Qichao, complained in 1903 that the most frequent noise in lecture and theater halls attended by Chinese was the constant coughing, spitting, and nose blowing.[27] At autopsies, victims' lungs often displayed lesions typical of pneumoconiosis. Not surprisingly, Western pathologists insisted that these conditions were particularly conducive to the propagation of pulmonary tuberculosis.[28] As in their homeland, Chinatown residents suffered severely from this silent and slow killer, incongruously called the "white plague."[29]

From Miasma to Germs

Informed by Britain's sanitary model, public health in America first flourished in urban centers of the Eastern Seaboard and the Midwest. The reappearance of cholera in 1849 cast attention on environmental conditions such as overcrowding and lack of clean water. In their enthusiasm for the new sanitation, local officials proposed community management of urban wastes, in part because of concerns about the presence of dangerous sewer gas. Plumbing became a critical component of the American quest for good health and social order. Under municipal oversight, an army of professional plumbers descended on households to inspect and install new fixtures in accordance with updated codes. Contemporary household water systems included cisterns and stone-topped cesspools, wooden or iron drainage pipes, open drains, and private sewer lines.[30] Safe water traps and simpler flush water closets became standard. Recommended by the American Public Health Association, such measures were advertised as necessary long-term investments to maintain and improve the urban infrastructure. Although this work demanded considerable resources and manpower, it was imperative to proceed at once. Yet, like all infrastructure projects, such measures usually received lower funding priority in contrast with outlays for clinics and hospitals.

In America, social and economic elites, as well as health officials, mobilized emotions of horror to enforce physical boundaries and attempt to control and modify the lifestyle of the nation's growing population.[31] Instead of just a synonym for dirt, "filth" represented a strong visual indictment of conditions in the material world and, by extension, of human values and behavior. For Edwin Chadwick, the British sanitary reformer, all smell—often coded as "stink"—was also a pervasive diagnostic sign of illness and decay as well as questionable morality.[32] Personal and public cleanliness were quickly equated with order and progress, while filth and foul odor represented chaos and barbarism.[33] Following the Civil War, health officials in most U.S. cities began to collect vital statistics—births, marriages, and deaths—to identify locations of increased disease and mortality. Urban tenement districts were seen as breeding places for cholera, typhus, diphtheria, tuberculosis, and smallpox. As miasmatic exposures often engulfed entire neighborhoods or even towns, according to prevailing theories, everybody was at risk, and differences in the incidence of disease could be easily explained based on racial constitution and susceptibility.

Smell remained an important sensory impression, yet odors were difficult to conceptualize, classify, and recall, except in relation to particular causes and effects.[34] Invisible, elusive, and subjective, scents usually were classified as agreeable or repulsive. Moreover, the popular idiom about passing the smell test was linked not only to food but to propriety and credibility. Based on new sanitary rules, a clean and deodorized culture would breed healthy and moral citizens.[35] Those who followed this late-nineteenth-century American sanitary makeover would personally feel, work, and behave better, a distinct advantage in any quest for wealth.[36]

Odors clung to individual bodies, discharging malodorous substances such as sweat, urine, and feces.[37] Beyond saturating clothing, these smells clung to the skin, identifying residents for instant discrimination and targeted sanitary intrusions. Newly arrived foreign-born immigrants and their offspring were expected to adopt hygienic values on their road to assimilation and eventual citizenship. Weakened by long voyages, high-density living, and limited immunities, these "unwashed" newcomers were often the first victims of infectious diseases racing through the slums. A "sickening stench"[38] emanated from uncivilized newcomers.[39] Whether Africans, Irish, Jewish, or Chinese, most "smelly immigrants"[40] were judged dirty, repulsive, and even dangerous; their foulness and loathsome diseases threatened to spread to the rest of the population.

Filth consciousness varied among societies.[41] Not unlike pre-Enlightenment Europe, China remained largely unaware of the nefarious effects of polluted environments. Reflective of traditional Chinese religious and humanitarian beliefs, "public health" (*weisheng ke*) actions centered primarily on the sponsorship of shelters and hospices as well as the proper location of cemeteries and disposal of unattended corpses.[42] Any suggested connection between bad smells and the health of a city was met with contempt; these odors were considered normal components of their social lives.[43] Garbage was not viewed as a hazard; removing it was not a priority. Use of human waste as fertilizer was widespread.[44] In fact, ordinary Chinese scoffed at the idea that unwholesome conditions could be sources of disease. Residents had no conception of direct contagion from air and bodily discharges.[45] Vigorous debates among Chinese practitioners centered on astronomical patterns, seasonal changes, unsafe foods, and evil spirits. Their appearance was part of the natural cosmic pathway responsible for the movements of the sun and stars and for the seasons of the year.

Long before foreign arrivals, China functioned as a mostly rural, preindustrial society; dust and crowding were part of ordinary Chinese life.[46] The image

of an overcrowded, extremely poor, and diseased China populated by foul-smelling individuals came to dominate Western discourse.[47] In letters and diaries, Western diplomats who visited China railed about "the worst imaginable" aromas permeating everything in that country. Fields fertilized with liquefied human feces and polluted streams clogged with refuse repulsed visitors.[48] Beijing (Peking), the capital, nicknamed "Peking-les Odeurs," was "superlatively disgusting" with running sewage on streets and large cesspools connected to an open canal that flowed through the Forbidden City, past the foreign legations compound. The local population was deemed "ignorant of the most elementary laws of sanitation, cleanliness or decency."[49]

For millennia, societies had employed agents capable of masking, retarding, or preventing decay and its reek. Smoke and fire remained traditional options to eliminate decomposition. Burning buildings and objects corrupted by miasma had both empirical and religious roots. Its vaunted purifying effects went back to antiquity and were described in Christian scriptures.[50] Other attempts to neutralize malodorous miasmas like garbage and rubbish consisted of the application of aromatic and, later, chemical substances such as sulfur and lime. In homes, reflective surfaces created with glazed tiles were effective in avoiding the absorption and retention of foul matter. Varnish applied on furnishings and plaster or paint on walls accomplished a similar objective. Over time, such measures were deemed empirically effective and thus became part of a growing body of disinfectants widely employed in domestic and public venues to cleanse air, water, and soil, in addition to clothing and household fixtures.

Sanitarians in the West received a substantial boost in the early 1890s through the gradual adoption of principles and methods based on the emerging science of bacteriology.[51] Distinctive microscopic agents or "germs," capable of invading the human body, replaced earlier chemical theories for explaining the phenomena of disease on the basis of fermentations by specific "zymes."[52] Parasites and fungi seemed to point the way.[53] Led by French chemist Louis Pasteur and German physician Robert Koch, successive laboratory discoveries in the 1870s and 1880s revealed a new world of microorganisms responsible for some of the most notorious infectious diseases then afflicting humans and animals. Invisible to the naked eye and ubiquitous, germs were proven to exist in the environment, soil, and even living beings, capable of invading, multiplying, and killing their hosts.[54]

Such laboratory findings allowed sanitary science to create a new rationale for its actions. Previous notions of filth, miasma, and contagion could be

successfully folded into the bacteriological paradigm; old-fashioned cleansing and deodorizing was reframed as destroying disease-causing bacteria. In spite of resistance from some sanitarians,[55] traditional villains such as filth and bad smell were easily recast as purveyors of potentially dangerous germs,[56] still the focus for elimination.[57] This notion easily meshed with previous environmental or miasmatic beliefs, putting greater stress on individual behavior. Public health reformers redoubled their efforts to promote personal and domestic hygiene. Up-to-date plumbing and ventilation in private homes would prevent fecal contamination and diffuse bacteria-laden air.[58] To destroy them, a vast advice literature on germs and powerful new disinfectants flooded the market. Although mostly targeted toward America's middle and upper classes, sanitary campaigns and a veritable media blitz about the wonders of laboratory science fostered an increasing germ consciousness that all too often turned into obsession.[59]

The dread of bacteria became a modern malady conjured by sanitarians.[60] Danger from such ubiquitous aggressors lurked everywhere, including on common household items and even paper money. In San Francisco another potential hazard was Chinese saliva. Before ironing, laundry workers usually dampened washed cloths by spurting water from their mouths, forcing the authorities to issue regulations designed to prevent such "sprinkling" practices.[61] For sanitarians, such fearmongering was not new; it remained effective for explaining the consequences of a risk and mobilizing public compliance. Yet, if excessive, dread became extremely harmful, turning into panic or terror and thus undermining the very objectives sought to prevent disease.[62] With bacterial causes established for many lethal infectious diseases, and the specter of dramatic cholera outbreaks still hovering over an anxious American public, concerns broadened in the 1890s. Larger and more integrated urban areas such as San Francisco fostered increased human contact and exposure to lethal organisms. Railway transportation linked neighborhoods and cities, even different regions of America, allowing germs to travel easily from coast to coast. International shipping carried the potential of importing foreign bacilli and their loathsome diseases.

Sanitation in Chinatown

San Francisco's sanitary activities were based on the Chadwickian paradigm. During the first cholera epidemic in 1850, the city established its permanent health board to monitor conditions, especially in narrow streets filled with gar-

bage and the remains of animals. Like its British counterparts, the local health board was charged with the duty to implement sanitary regulations and abate public "nuisances." This notoriously ambiguous legal designation included all conditions deemed offensive and thus violating the rights of a majority of the population. Dividing the city into several districts, sanitary officials first mapped and conducted surveys; inspectors were then sent to check on streets, buildings, and living conditions. The city's notorious Barbary Coast was described as a "stagnant pool of human immorality and crime spreading its contaminating vapors just like swamps poisoned the air, triggering malaria."[63]

Sanitarians believed that environment and locality were critical to the genesis of disease. Their descriptions were filled with symbolic words like *filth* and *stink*, terms meant to stir disgust and to demonize and isolate the undesirable "other" that lived in an unsanitary world.[64] Although similar unsanitary conditions prevailed in other crowded and poor neighborhoods, inspectors targeted Chinatown as particularly obnoxious. Influenced by missionary tales, San Franciscans compared the district to a crowded village in late-imperial China. Because unhealthy circumstances supposedly affected people's behavior, vices such as gambling, prostitution, and opium addiction were taken as further signs of Chinese physical and moral decay.[65] The health board took Chinatown's grime and odors as expressions of a dogged rejection of American values and the fruits of civilized life, justifying public prejudices and legal restrictions that culminated in the Chinese Exclusion Act in 1882.[66] A local ordinance enacted in 1890 magnified the unsanitary conditions by stipulating that businesses such as slaughterhouses and hog factories remain in the district.

What local sanitarians characterized as "wild playing of brooms and mops" met with widespread indifference or stubborn opposition in Chinatown. Even the Oxford-educated Chinese consul general, Ho Yow, wrote in a 1900 pamphlet that filth was simply matter temporarily out of place; in a harmonious natural world there was never true waste.[67] In subtropical Guangdong province, periodic floods and ample rains, especially during summers, provided natural cleansing, and the refuse reinvigorated the land. In San Francisco's semiarid climate, conditions were even more favorable. Daily ocean breezes displaced polluted air toward the East Bay's foothills, while rainwater running down from Nob Hill to the business district and shoreline washed most Chinatown streets along the way. Garbage collection in San Francisco was not a municipal function; it remained optional, sporadic, and ineffective, leading to unwelcome accumulations, especially in poor neighborhoods. Unmarked buildings and

passageways often became convenient dumping grounds for reeking refuse. Landlords, focused on profits, would not waste their money on private garbage haulers, and shopkeepers would hire them only reluctantly, hoping to attract tourists.

The revulsion created by such sensory impacts became central to a political and cultural process aimed at restraining, and perhaps displacing, an alien population.[68] A report on Chinatown "nuisances" described Wong Chut King's home, the Globe Hotel, with its open water closets and cesspool, as a marker of ethnic identity: "generating the peculiar Chinese odor."[69] Chinatown, according to one Westerner, produced "a sensation upon the olfactory nerves of the average American which, once experienced, will not soon be forgotten."[70] The reek from decaying fruit, vegetables, and offal mingled with pungent fumes from thousands of home fire pits and street kitchen stoves. Salted fish drying on flat rooftops compounded the problem.[71] Sweet vapors from burning incense, tobacco, and opium further enhanced the mixture. With immigration restrictions responsible for the disproportionate number of males in the district, Chinatown's overall sanitation was seriously compromised by the absence of women, a reality seldom considered except in discussions about violence and prostitution. In San Francisco and elsewhere, the burden of cleanliness usually fell on wives and mothers, who played critical roles in housecleaning, food preparation, and childcare. Lack of Chinese women in the domestic realm deeply affected personal and family hygiene.[72]

In another key sanitary action, the San Francisco Health Board condemned all antiquated plumbing systems, sending inspectors and a battalion of city-hired plumbers for house-to-house visits. Most sublet premises in Chinatown, crowded with occupants and lacking sanitary facilities, were linked by makeshift connections to original sewer lines traversing the district.[73] To some extent, Chinese insistence on retaining cesspools represented practical and symbolic gestures of defiance.[74] To the chagrin of property owners and renters, the plumbers sought out defective pipes and venting traps, then installed new fixtures according to updated codes.[75] Such American obsession with domestic plumbing and sewers was particularly puzzling to Chinese tenants who feared rent increases and opposed all intrusions into their homes. Many rejected the improvements, willfully damaging new iron fixtures and drainpipes as soon as they were installed.

In 1854, a prominent San Francisco physician, William Rabe, had urged authorities to survey the Chinese settlement because of its alleged unhealthiness;

Globe Hotel, site of the first plague death in Chinatown.
Unpublished photograph from an album dedicated to John Marshall Williamson, M.D., former president of the San Francisco Health Board (author's collection).

the real intent was to remove Chinatown from the heart of the city.[76] Concerns persisted that cholera, deadly in Western frontier towns, would reappear. This first official expedition into Chinatown took place in an atmosphere of growing anti-Chinese sentiment in California, exemplified by the exclusionary policies of its governor, John Bigler.[77] Not surprisingly, the search confirmed the lack of sanitation, including defective drains. Rabe's inspection pronounced the district a health threat to the entire city, and this episode set the pattern for more than half a century of surveillance and periodic inspections.

According to local officials, Chinatown remained a dangerous "plague spot" and a breeding ground for diseases, thus reaffirming notions that the Chinese possessed tainted blood and were prone to poor health. Personal contacts with debilitated Chinese, said to discharge contagious vapors, were considered taboo. "Sickness maps" portrayed Chinatown as the most infected part of the city, followed by the Latin Quarter and South of Market neighborhoods. Prepared by the health department's statistician for the 1897–98 municipal report, these maps explained that many Chinese in California routinely converged in Chinatown, bringing fevers, tuberculosis, and other pulmonary complaints, saturating the district's air with deadly germs.[78] Both this new bacteriological argument and the old claim that the Chinese had a hereditary propensity to sickness served to underpin political, social, and economic discrimination. A sensational print media amplified and diffused such representations, which found widespread acceptance throughout California.

Employing what quickly became a model for subsequent public health rhetoric, city inspectors adopted a dramatic narrative style, embroidering on their dangerous safaris through Chinatown's exotic subterranean quarters and tenements. In time, this discourse consolidated the notion of a perpetual health threat—a "laboratory of infection" in need of special cleansing, if not total elimination. In 1880, the San Francisco health officer concluded that the entire district not only represented a public "nuisance"[79] but was also a "great reservoir of moral, social and physical evil."[80] Describing an alley in Chinatown, the 1880 report referred to piles of dirt mixed with human excrement and garbage as "defying all civilization."[81] Some even threatened to blow up the whole Chinese quarter with explosives.[82] Chinatown became identified as a prime example of "toposmia," the spatial demarcation of odors.[83] Containment and segregation were specifically directed at certain places and people, based on cultural intolerance of dirt and smells.[84] Walking through Chinatown, one visitor said, "Passing through an alley-way, we entered a perfectly dark court where nothing was to be seen but so much to be smelled that the imagination became more painful than the reality could have been."[85] Consul Ho Yow sought to excuse the sanitary conditions along class lines, explaining that Chinatown's working class was just as clean as any other poor migrant nationality; it was unfair to compare Chinese laborers with San Francisco's bourgeoisie.

Sanitarians have employed the weapons of fear and panic ever since the dawn of public health.[86] In 1880, an ultimatum informed Chinatown's inhabitants that they had thirty days to leave their homes en masse because they posed a serious

threat to the city. Attorneys for the Chinese leadership, however, argued that city authorities were acting beyond their powers and in violation of the Burlingame Treaty between China and the United States. Faced with the possibility of judicial action, health officials retreated, explaining that the proposed removal was merely a policy proposal.[87] Seeking harmony, an important Chinese cultural trait, successive "crusades" against filth in Chinatown were reluctantly endorsed by the

Chinatown backyard with debris and garbage, early 1900s.
Williamson album (author's collection).

Chinese consul general and merchants from the Six Companies. Yet vituperation proved counterproductive: most ordinary Chinese balked at the need for improvements, clearly not persuaded of the health benefits promised by the new hygiene.[88]

Third Plague Pandemic

In search of a cause of death for Wong Chut King's death certificate in March 1900, Frank Wilson examined the body, discovering an egg-shaped blackish lump in the right groin area. Could it be venereal, or did it signal something much worse? In early January of that year a group of medical experts had expressed confidence that no foreign illness would stage a "disastrous invasion" of America because of the "sanitary improvements of progressive civilization." Bubonic plague was considered an "Oriental disease," lurking in contaminated Asian soil and transmitted between humans as cholera and smallpox were.[89] Its bacilli were generated in filthy matter, and the disease rarely afflicted individuals adhering to new Western hygienic principles. A recurrence of the medieval terrors was totally out of the question, given the "infinitely superior" modern sanitation. Indeed, the availability of experts with "intimate knowledge" of plague's biological characteristics provided sufficient protection: there was no need to fear an introduction of the disease into the United States.[90] In spite of such reassurances, other experts predicted that this disease would eventually reach Western shores. Two recent episodes in San Francisco, in the fall of 1898 and summer of 1899, had raised the specter of plague among the Chinese population, but its presence was never confirmed.

Westerners remembered bubonic plague as a terrifying and lethal disease responsible, in part, for the fall of the Roman empire under Emperor Justinian. The notorious Black Death, in turn, devastated medieval and early modern Europe, again killing millions.[91] A third pandemic, also born in Central Asia's natural rodent reservoirs, was spreading eastward as a result of population growth, urbanization, and trade, entering China's western Yunnan province during the late eighteenth century. A 1792 poem from Yunnan illustrated the relationship between dead rats and the appearance of a devastating epidemic that soon took the poet's own life.[92] By the 1850s, this "black fever" had reached western Guangdong province, arriving in the Pearl River Delta by the early 1890s.[93] Transmitted from Guangzhou—the city suffered 35,000 deaths in 1894—plague became endemic along the coast,[94] affecting villages and the British colony of Hong

Kong.[95] For the Chinese, the "rat epidemic" (*shuyi*) represented a fateful convergence of predisposing factors that involved the gods, stars, seasonal changes, unsafe food, and evil spirits. Some attributed it to a local poisonous qi rising from the ground, a notion of environmental agency similar to contemporary Western miasmatic theories.[96]

For centuries, Western scientists had categorized plague as an infectious disease like typhus and cholera, transmitted by contagious particles arising from corrupted soil and air. Sanitarians persisted with their environmental "dirt and smell" notions into the 1890s, speculating that filth, accumulated during the dry season, saturated the soil with sewage.[97] Because of Hong Kong's status as a British colony, scientists had an opportunity to study the 1894 plague outbreak there.[98] Afraid that the disease would spread from southern China to Japan, the Japanese government sent Shibasuburu Kitasato, a former student of Robert Koch, to Hong Kong. Alexander Yersin, a scientist at the Pasteur Institute in Paris, arrived in the city at the same time. With ample support from local authorities, Kitasato soon claimed to have found the agent responsible for the disease, and he published his findings on July 7, 1894.[99] Yersin, working without assistance, isolated a slightly different bacillus on June 28, presumably located in polluted soil, and confirming the role of rats in the transmission of plague.[100]

After reviewing the published findings, experts discovered significant morphological differences between Kitasato's and Yersin's organisms. Indeed, before 1900, there was almost unanimous agreement, even among Japanese scientists, that Kitasato had erred and at times mistakenly described the diplococcus microbe responsible for pneumonia. Kitasato himself continued to admit "conspicuous" differences in appearance, cultural characteristics, and staining reactions.[101] No matter; the traditional miasmatic beliefs were easily integrated into the new bacteriological paradigm: plague was still a soil disease, now caused by a specific microbe living and breeding in unsanitary, earthen floors.[102] Conventional wisdom suggested that Chinese residing in houses with bare, dirty, and smelly floors were in danger of coming into contact with plague germs through dust. Although humans remained the primary carriers, this theory also explained why burrowing animals such as rats could get easily infected.

The germ theory also reinforced traditional public health measures: prompt quarantine, early recognition and isolation of cases, segregation of contacts, and disinfection. In Hong Kong, authorities declared ramshackle Chinese homes unfit for human habitation and attempted to close them. Yersin even suggested burning down afflicted villages.[103] Colonial sanitarians believed that burning

houses to the ground and removing a foot of ground soil would definitely destroy all plague bacilli. Costly proposals to permanently end the threat of plague involved the destruction of entire districts, which would be replaced with housing that provided more space, air, and light. Predictably, in urban China, such plans faced strong opposition from homeowners and renters, prompting evasions and flight despite massive police intervention.[104] During the ensuing years, plague mortality in Hong Kong and South China remained in the thousands. Plague season began in early spring, peaking in summer and declining by September; this prevalence was subsequently linked to favorable climatic conditions for the cycles of rat and flea reproduction. The disease quickly spread to India, where thousands perished, especially during epidemics in Bombay (1896) and later Calcutta (1898).[105]

Information about the clinical and pathological characteristics of plague in Asia was widely published in Western medical journals and newspapers.[106] By the late 1890s, scientific authorities such as Robert Koch and Patrick Manson firmly believed that plague was a rat-borne disease. Smears obtained from buboes and abscesses were said to be almost always positive. Inoculation of suspicious material in experimental animals, primarily guinea pigs, rabbits, and monkeys, prompted bacteriologists to hope that they would soon be able to detect the plague bacillus on an ill person's clothing and in the dirt from infected houses.[107] A conference of European nations held in Venice discussed protective measures against the international spread of plague. Based on previous experiences with cholera, regulations dealt with the inspection of crews and passengers leaving infected ports, in addition to isolation of all sick persons and disinfection of ships and merchandise. In spite of these measures, the pandemic began to cross the Pacific in the late 1890s, first afflicting Formosa and Japan, then the Philippine Islands, Australia, and eventually Hawaii. "All America is now looking at the Pacific slope to see that this terrible scourge does not enter our fair land," warned a San Francisco medical publication.[108]

The first plague scare in the city occurred in November 1898, following the arrival and quarantine of a French bark, the *Duchesse Anne*. Since leaving Hong Kong, the ship had lost its captain and a crewmember, apparently to the disease. Shortly thereafter, city physician John Gallwey received a tip that eighteen Chinatown residents living near the Globe Hotel had died rather suddenly of high fever, their deaths attributed by the Chinese themselves to the nefarious rat disease.[109] The person sounding the alarm was Consul General Ho Yow, based on information obtained from a local physician, Minnie Worley, who worked for

the Chinese Christian Missions and had attended one of the patients. While pneumonia was the presumptive diagnosis, the symptoms seemed unusual, and the afflicted individuals died rapidly.[110] In response, Chinatown residents organized a ceremony urging the gods to protect their district. Surrounded by hundreds of wailing denizens, a tall priest robed in yellow silk chanted while beating his cymbals in a circle of punk lights and torches.

Following a hastily arranged meeting of the city's health board, Mayor James Phelan was persuaded not to release any information about this outbreak: it would create a panic among the population and damage San Francisco's commercial interests. Health inspectors hurried to the house of the last victim, isolating it and ordering neighbors to stay away. However, an autopsy of the victim's body, performed by the city bacteriologist, John C. Spencer, failed to show signs of plague.[111] Microscopic slides and repeated cultures did not detect plague bacilli, prompting health officials to cancel the quarantine.[112] Rumors about the presence of plague leaked in the form of sensational telegrams published by newspapers in Chicago and New York, but the collective alarm eased, and no one challenged Spencer's diagnosis in spite of the unusual spate of fatal respiratory ailments. The city seemed safe, and holiday business flourished.[113] Causes on the victims' death certificates ranged from liver cirrhosis to pneumonia.[114]

The second episode occurred in June 1899, following the arrival of another transpacific liner, the *Nippon Maru*, with some passengers suspected of being sick. Although crew and most passengers showed no signs of illness, they were all promptly placed in "antiseptic imprisonment" at the federal Marine Hospital Service Quarantine Station while the entire ship was fumigated. Health officials then discovered eleven Japanese stowaways, hidden in the hull's coalbunkers. Expecting arrest, two men escaped during the night by jumping into the cold waters of San Francisco Bay. Still surrounded with life preservers, their floating bodies were discovered the next day and brought to the city for autopsies.[115] On June 30, Spencer's successor as city bacteriologist, William F. Barbat, submitted his official report describing "very light" cultures of microorganisms resembling plague bacilli.[116] Almost immediately, this recent medical graduate, barely twenty-six years old, admitted that his diagnosis was solely based on smears and cultures. With his primitive laboratory at City Hall affected by a recent earthquake, Barbat would not be able to confirm his findings through animal inoculations because he lacked equipment and experimental animals. Given the implications, the recently arrived federal quarantine officer, Joseph J. Kinyoun (one of the most prominent bacteriologists in America), requested

access to the tissues and cultures for further studies and experimental verification at his own laboratory.[117] However, Barbat, working inside San Francisco's municipal building, had already destroyed all his presumed plague cultures. Laboratories, populated with scores of culture tubes containing invisible but potent killers, were considered very dangerous. All local bacteriologists sought to reassure the public that these facilities remained safely under lock and key.

After examining photographs of Barbat's slides, Kinyoun officially notified the San Francisco Health Board that they did not seem to resemble the plague bacillus; he suggested instead the presence of a pneumococcus microbe. Board members, in turn, quickly responded by accusing Kinyoun of not knowing the difference between plague and pneumonia bacilli. Such hostility toward the federal quarantine officer stemmed from repeated and ongoing clashes over the sanitary control of San Francisco's port. The local press, however, extolled Kinyoun's expertise, stressing his exceptional training with such luminaries as Koch, Pasteur, and Roux in Berlin and Paris, which placed him in the company of a new elite prepared to tame those invisible aggressors. Although he had no firsthand knowledge of plague, Kinyoun's diagnosis was considered unassailable. What loomed like a David versus Goliath battle between "microbe hunters" ended quickly. Backed by his indisputable professional stature, Kinyoun's categorical rejection of the plague diagnosis pleased California leaders and reassured the local business community.[118] Before the end of July 1899, the *Nippon Maru* affair was definitely over, but rumors of plague reaching the West Coast persisted.

Behind the scenes, however, doubts lingered. Public suspicion settled on the notion that corrupt local health officials had used the city bacteriologist's spurious findings to secure political leverage and higher salaries, a fateful judgment that would influence subsequent responses to plague in San Francisco.[119] For his part, Kinyoun possessed original slides of plague organisms collected from contemporary investigators like Kitasato for comparative purposes. The Japanese scientist continued to stress the existence of "conspicuous" morphological and cultural differences between his microorganism and the one discovered by his French rival Yersin in 1894. This fostered confusion among the small band of new Pasteurians eager to pursue laboratory-based diagnoses.[120] In fact, Kitasato insisted until 1900 that the bacillus discovered by Yersin failed to cause plague, even as his Japanese colleagues suspected that Kitasato's "bacillus" was a contaminant.[121] A year later, one of the San Francisco supervisors alleged that Kinyoun told him in private that he initially employed a Kitasato specimen, compar-

ing it to Barbat's findings. Eventually, he realized his error but decided to keep silent in deference to the Japanese scientist's reputation.[122] Such public disagreements between experts weakened their professional authority and allowed less-qualified opponents to discredit all bacteriological diagnoses and public health procedures.[123] More significantly, the local belief persisted that plague was essentially a human disease spread by contacts between individuals.[124] Yet by the time human cases were found, there was already a significant reservoir of infection in local rodent and flea populations.[125]

The Final Diagnosis

Given his suspicions about the cause of Wong Chut King's death, Frank Wilson contacted his superior, San Francisco health officer Aloysius P. O'Brien, asking him to visit the coffin shop and offer a second opinion. O'Brien was an 1889 graduate of the University of California Medical Department and a veteran of the Spanish-American War and had worked in a smallpox hospital in Manila. A surgeon specializing in genito-urinary and rectal diseases who had taken the municipal post three years earlier, he was ousted during political infighting in June 1899. Now reinstated under the new city charter by the Democratic administration of Mayor Phelan, O'Brien was eager for vindication and anxious to demonstrate his professional competence. The dead man's bluish swelling certainly had all the characteristics of what physicians called a bubo—an infected lymph node filled with blood and plague bacilli, a characteristic sign of bubonic plague. To confirm their clinical suspicions, Wilson and O'Brien decided to summon the new city bacteriologist, Wilfred H. Kellogg, to a rendezvous at the undertaker's establishment that same evening. Only pathology and the laboratory could provide a definitive diagnosis. Originally from Kansas, Kellogg was just thirty years old, a recent graduate of the University of California Medical Department, with just barely two months on the job. His four years in medical school had given him ample opportunity to learn the fundamentals of the new universe of microbes, and he had done postgraduate work at Stanford University and gone on academic visits to London and Paris. Since the late 1880s, bacteriology had gradually gained acceptance as an important field of medical science and practice, but veteran physicians, educated and trained in earlier times, remained skeptical about its potential for diagnosis and treatment. Modern medicine was at a crossroads. Results obtained from experimental research were already being incorporated into the daily work of ordinary physicians,

narrowing the distance between bedside and laboratory practice. William W. Kerr, professor of clinical medicine at the University of California, proclaimed that although "the germ theory is but in its infancy," it had already made real contributions to surgery and preventive medicine.[126] But professional tensions grew as pathology and the laboratory began to trump clinical observations.[127] Instead of the patient's voice and the clinician's skillful gaze, analyses of tissues and bodily fluids could now determine a final diagnosis. Armed with their microscopes, bacteriological cultures, and test animals, the new "Pasteurians,"[128] or microbe hunters, claimed to be the only dependable diagnosticians. Beginning in 1892, the University of California Medical Department offered lecture courses on bacteriology, supplemented by practical demonstrations in a special laboratory equipped with the latest microscopes imported from Germany. The school's histology laboratory was touted as the only one of its kind on the Pacific Coast.

Because San Francisco's health authorities were aware of the Chinese cultural aversion to bodily dismemberment, Kellogg resisted the impulse to order a full autopsy of Wong Chut King. Instead, he proceeded to remove a few samples from the prominent bubo for microscopic examination at his laboratory in City Hall. Remembering his predecessor's recent experiences—William F. Barbat had been a schoolmate—Kellogg was keenly aware of the consequences of a diagnostic misstep.[129] After a careful microscopic examination, he nevertheless claimed to have detected the presence of organisms resembling plague bacilli. His preliminary findings surprised no one. Reflecting on his actions years later, Kellogg admitted that he had been "on the lookout for plague" since its appearance in Honolulu in December 1899.[130] The Honolulu outbreak, which led to the accidental burning of the entire Chinese quarter in that city, had raised concerns about an imminent arrival of plague-infected people, cargo, and rats on the West Coast.[131] Because San Francisco and Hawaii were closely linked through the sugar trade, the Hawaiian plague epidemic—like leprosy two decades earlier—was bound to shape San Francisco's public perceptions and strongly influence the behavior and actions of its health officials.[132] In February 1900, the San Francisco Health Board had sent a representative to Honolulu, Ichitaro Katsuki, a classmate of Kellogg's who was also familiar with bacteriological investigations. Katsuki's mission was to observe the actions of Hawaiian health officials and collaborate with their pathological studies.[133]

Kellogg vowed not to repeat Barbat's diagnostic fiasco. Because the San Francisco Health Department's laboratory was still unable to inoculate the infected material into animals, he resolved to take his microscopic slides and tissue

samples and travel to Angel Island the following morning for a visit with Kinyoun and his laboratory at the federal quarantine station. Kellogg's plan was to seek confirmation of the preliminary diagnosis and request the inoculation of some animals with infectious material taken from his samples. Their prompt deaths, followed by pathological examinations and more bacteriological cultures, would yield the final proof for the existence of bubonic plague and thus justify public health measures. However, this process would take at least 48 hours. Given the previous plague scares and the recent outbreak of the disease in Hawaii, could San Francisco health officials afford to wait?

At a late session that very night chaired by board president John M. Williamson, a veteran local health official and faculty member at the University of California Medical Department, the health board confronted its predicament. Barely two months into their jobs, the new appointees wanted to demonstrate their professionalism and willingness to make decisions regardless of political consequences. Too many of their predecessors had ended their terms in ignominy, accused of patronage and corruption. Anxiety about an impending appearance of plague persisted throughout San Francisco, and the local press demanded a strict enforcement of quarantine regulations at the port.[134] Calls for the abatement of "nuisances," especially in Chinatown, always "reeking with filth," had recently intensified. If calamities occurred, Chinese would be the "scapegoats."[135] The prevailing sentiment was not to delay action until a final bacteriological verification. Moreover, instead of following traditional practices and solely isolating suspected sites—in this case, the Globe Hotel and the undertaker's establishment—health board members took the unprecedented step of imposing a "precautionary" quarantine of the entire district.[136] Among those strongly pressing for this measure was the chief of police, William P. Sullivan Jr., an ex-officio member who had already threatened to close Chinatown in view of the persistent gang warfare. Conveniently, the presumption of plague presented him and his police department with an excellent opportunity to deal more aggressively with the Chinese population. Better still, public dread generated by the presumed invasion of "Asiatic plague" also offered, perhaps, a chance for finally removing all residents from the district—a long-standing but repeatedly frustrated objective.[137]

Notified of the decision, Chinese consul Ho Yow immediately questioned the plague diagnosis and proceeded to hire a local attorney and a physician for the purpose of requesting a complete postmortem examination of Wong's body. In a statement quoted in the press, Ho explained that he had lived in Guangzhou

and Hong Kong while thousands of Chinese were dying of plague, including servants living in his father's house. Based on his personal experience, the characteristics of Wong's solitary and slow demise were at odds with the typical behavior of the pandemic. Supported by a sworn affidavit from the two Chinese practitioners who had cared for Wong, Ho insisted that the poor man had died of "blood poisoning."[138] "Reliable" information provided by the Six Companies established that Wong was a long-time resident of Chinatown; the assertion was meant to reassure everybody that his sickness was not a new import. Yet, prior to death, concerned Chinese residents had told laborers from the San Francisco Board of Public Works of a rat die-off in the district.[139]

The *Chinese Western Daily* immediately challenged the validity of the death certificate O'Brien issued, characterizing it as a botched attempt to blackmail the hapless Chinese undertaker. The decision to quarantine was considered a retaliatory measure for the current tong wars, a typical example of local oppression, similar to aggressive actions already taken in Honolulu.[140] This blatant show of force seemed primarily designed for the benefit of the local police and health authorities, who wished to inflate their budgets and demonstrate to the public that they were soft neither on crime nor on filth. To restore harmony, "let us burn incense and pray for the blessings of Heaven," urged the publication.[141]

Undaunted by Chinese opposition, the health authorities, claiming dangers from contamination and possible spread of disease to the rest of the city, fumigated the Globe Hotel basement and the coffin shop with sulfur. Wong's clothing, bedding, mattress, bedstead, and other articles extracted from the basement hole were soaked in coal oil and burned. Provided with a certificate listing bubonic plague as the cause of death,[142] the victim's remains were wrapped in a linen shroud that had been soaked in a solution of bichloride of mercury, a potent antiseptic. Wong's body was then placed in a lead-lined coffin filled with lime chloride and sent to the crematorium of the Odd Fellows Cemetery, where it was promptly incinerated. The threat seemed over. One local newspaper crowed, "The body of the dead Mongol has been reduced to ashes in the fierce flames of a crematory."[143]

In Chinese terms, however, Wong's solitary, unnatural death prompted him to miss the traditional funeral and ritual separation from the community (*sang li*), the most important event in his life.[144] Wong's bones would never come to rest in the home village alongside his ancestors; his scattered ashes would float into the cosmic void.[145] His soul would not be able to find its way back to China, trapped forever in the underworld without a chance of passage to heaven and

possible reincarnation. Deprived of food and money offerings, Wong's spirit became transformed into an unbounded, unpredictable phantom (*gui*) capable of joining the forces of darkness, malevolence, and death.[146] "Wandering ghosts," like Wong's, were condemned to relive their last moments and usually hovered near their previous earthly locality.[147] His soul would wander through Chinatown seeking revenge for the sorrows and sufferings it had endured. Former friends and associates were on notice: seek divine protection or placate and bribe Wong's evil genius. Hiding on rooftops or in rat's nests, the ghost would threaten to destabilize the cosmic balance of the neighborhood, inviting more sickness and death.[148] Perhaps a Daoist priest needed to be summoned to perform an exorcism of the haunted premises at the Globe Hotel. After an inauspicious beginning, this Year of the Rat promised more disruptions and misfortune for Chinatown's harried residents.

Officials, Mandarins, and the Press

> Now plague is powerless before its wonderful remedies. There is no danger for San Francisco. We stand in the front trenches of the bulwarks, which protect the country from invasion. An army of scientists is waiting to save millions.
>
> —*SAN FRANCISCO EXAMINER* (FEBRUARY 4, 1900)

San Francisco and Its Health Officials

In 1900, San Francisco was the largest metropolis west of St. Louis, with a population of 342,782. The city by the bay remained a point of convergence for new arrivals from the rest of the nation and abroad, with nearly 20 percent of its population foreign born.[1] Like other urban areas in the United States, San Francisco was home to a highly cosmopolitan and libertarian citizenry distrustful of government and unwilling to spend resources on community projects. Office holders were frequently denounced for wasting taxpayers' money, forcing the city to operate on the "dollar limit": $1 property tax for every $100 of assessed valuation.[2] The port of San Francisco continued to be the busiest harbor on the West Coast; trade with Asia, especially China, was particularly active. Slower urban growth rates since the 1880s, however, and the rapid development of Oakland, Los Angeles, and Seattle, had created a climate of economic insecurity, and there were calls for improved city planning and government reorganization.[3]

On January 8, 1900, James D. Phelan, an Irish Catholic Democrat, was inaugurated for his third two-year term as mayor of San Francisco. A banker and

son of a real estate tycoon—he himself owned property in Chinatown[4]—Phelan was a progressive deeply committed to municipal reform and city beautification designed to attract more residents, business, industry, and tourism.[5] Much was expected of Phelan with regard to the city's commercial priorities. Shortly after its creation in April 1894, the new Merchants Association had begun supporting a reform movement that promoted "business-like" city government modeled on corporate structures. Indeed, "progressive" merchants realized that their economic prosperity depended on the creation of a municipal authority based on scientific principles of expertise and efficiency. Therefore, these men sought to move beyond traditional, corrupt municipal governance based on political cronyism, arbitrary taxation, and extravagant expenditures.[6]

Thanks to bipartisan reform efforts and organized business, a new city charter, approved by San Francisco voters and the state legislature in 1898, was scheduled to go into effect at the start of the new century. The charter sought to instill civic pride and common purpose into a city drifting in the crosswinds of petty local politics and declining economic growth. Local trade associations and industry demanded greater administrative stability and efficiency.[7] The new framework gave the mayor greater autonomy and power, especially in the use of initiatives, bond issues, referenda, and the establishment of public utilities. With a majority of Democrats on the San Francisco Board of Supervisors—the local eighteen-member legislative body—the mayor could henceforth make appointments or remove members of city boards and commissions.

Mayor Phelan's opinions concerning public health closely followed the new sanitary paradigm based on microbiology. At a meeting of California health boards in San Francisco on October 25, 1897, the mayor acknowledged that healthier living conditions were a desirable social and economic goal, one that demanded governmental intervention. "Death lurks in our food, in the water we drink and the air we breathe," Phelan declared, and the challenge for municipal health departments was precisely to provide a salutary environment.[8] Unfortunately, the city's sewer system remained chaotic: 125 separate outlets discharged raw sewage into the bay through mains located underneath the wharves; the filth darkened waters near the docks. Crews on ships anchored in the "Dumps" of Mission Bay became sick; some even contracted typhoid fever. When the wind blew offshore during summers, a "cyclone of smell" filled the waterfront.[9] By the end of the century, the federally sponsored *Public Health Reports* published mortality statistics for major American cities. The West had acquired a reputation for being a healthy region with a mild climate, attracting

many individuals attempting to recover from chronic illness. Nevertheless, San Francisco, with 19.4 per thousand, ranked fifth, behind New Orleans, Washington, DC, Boston, and New York City. It was the least salubrious city in California. Of the approximately 7,000 deaths, 1,000 were attributed to tuberculosis.[10] Given the steady flow of new, young immigrants, healthy workers were a renewable resource.

At the turn of the century, public health in America remained poorly funded because of inadequate political support; health was seen as a private, individual concern. In 1899, Phelan had strongly advocated the elimination of disease in the city through public health measures. Instead, he went on to support an $18-million-dollar bond issue for the construction of a new city-county hospital, schools, and parks in the city.[11] Even before implementation of the new city charter, public health remained a low municipal priority. In September 1899, after some readjustments, the supervisors approved a municipal budget that allocated only $155,960 for the health department, with nearly two-thirds going toward the operations of municipal hospitals.[12] This neglect persisted even after the passage of the new city charter. Health department salaries were limited to $37,000. By comparison, the police department's allocation was $817,948 and the fire department received $563,000.[13]

The San Francisco Health Board consisted of the mayor of the city and "four physicians in good standing," holding their unsalaried offices for a term of five years. Officially appointed by the governor of California, they were required to be city residents. Traditionally, appointees were at the top of a corrupt system of political patronage and nepotism known as the "official pie counter." Some members were fashionable local physicians or academics who volunteered their time, using the posts for furthering their professional careers and social status. Others delighted in jurisdictional disputes with similarly intrusive state officials and officious federal quarantine officers. Even if some appointees appeared sincere in their efforts to seek sanitary improvements, most acted like cynical politicians focused on pork-barrel projects.[14] Their image as "political doctors" placed all health officials at a disadvantage in California's professional circles, already deeply divided in the face of significant scientific advances in medicine and surgery.

For decades, the San Francisco Health Department was kept on a short financial leash by the Board of Supervisors, caught up, as were other city units, in party politics and bureaucratic, feast-and-famine budget cycles linked to income from fluctuating tax collections. The health unit controlled the bulk of positions

outside of the civil service lists, thus becoming a primary donor for dispensing "golden bricks"—unclassified jobs—to "friends of the administration." In July 1899, all health board members were summarily removed amid of accusations of political infighting and excessive patronage. They were replaced by the "Burns gang," a new quartet appointed by Henry Gage, the incoming Republican governor, on recommendations from Daniel M. Burns, a local mining tycoon and political boss.[15] To protect the city's finances, the supervisors decided in the summer of 1899 to drastically lower the future budget of the health department from $80,000 to $31,000, a paltry sum barely sufficient to pay statutory salaries. Among them was Health Officer Aloysius P. O'Brien, who remained the highest paid city health official. The anticipated lack of money only compounded the board's traditional impotence in enforcing existing sanitary regulations even as it triggered efforts to reverse the cuts.

The mayor's newly appointed health board physicians took office on January 8, 1900, under police protection because their predecessors threatened to protest their dismissals in public as well as in the courts.[16] Phelan emphasized the competency of his choices, especially John M. Williamson, a 39-year-old Californian and graduate from the University of California Medical Department who became board president. Williamson specialized in genito-urinary surgery and was currently Professor of Anatomy at his alma mater. Prominently listed in the city's yearly Blue Books and with membership in the Bohemian Club, Williamson provided the social gravitas and professionalism sought by Phelan's new city charter. Another experienced member was Louis Bazet, a 52-year-old native of France, with a medical degree from Jefferson Medical College in Philadelphia and private practice experience in Nevada, Mexico, and San Francisco. Appointed by Governor Gage in September 1899 to the California State Board of Health, Bazet's simultaneous membership in both boards made him the ideal go-between for the state Republican and local Democratic administrations.

Also on the board was Rudolph W. Baum, a Californian with a medical degree from the Albert Ludwig University in Freiburg, Germany, who was schooled in microscopy and conversant with the theories and practices of bacteriology. Phelan's final appointee was William D. McCarthy, a 38-year-old graduate from the local Cooper Medical College. In an attempt at bipartisanship, some of Phelan's selections—Williamson, Bazet, and Hopkins—were Republicans. George H. Mendel, president of the board of public works, and William P. Sullivan Jr., recently appointed chief of police, became ex-officio board members.[17] The San Francisco Police Department remained instrumental in providing security for

all sanitary inspections and cleaning operations, especially in Chinatown. Since at least the 1880s, a separate "Chinatown squadron" had operated in that district, looking out for unlawful activities. In return for protection from inspections and arrests, they routinely demanded bribes from merchants, gambling establishments, and tongs.[18] Some even collected money from street cleaners employed for removal of "nuisances."[19]

Soon after Phelan's inauguration, Republican newspapers, especially the *San Francisco Chronicle,* launched a series of partisan attacks against the new health board, branding members "tax eaters" with excessive appetites for power and money. (To be fair, the newspaper had launched similar assaults on their extravagant predecessors.) Phelan's appointees were denounced as circumventing the civil service law with their "India rubber backbones" and attempting to bring new sanitary inspectors and staff on board with higher salaries;[20] physicians, however, were traditionally exempted from having to take the civil service examination. Rumors also circulated about members keeping secret bank accounts.[21] The attacks prompted William E. Hopkins, an ophthalmologist with a medical degree from the University of Virginia, to resign from the board. After several false starts, he was replaced by Vincent P. Buckley, general practitioner and son of the wealthy and well-connected pioneer, state senator, and bank owner. Buckley had graduated from the University of California Medical Department and performed postgraduate work at New York's Bellevue Hospital Medical College. Unlike Hopkins, Buckley was familiar with the municipal bureaucracy and public hospitals after serving as San Francisco police surgeon and then city physician in previous administrations.[22]

After being sworn in, Phelan's board members discovered that the health department was flat broke. For fiscal year 1899–1900, supervisors had authorized $46,960, a sum the "Burns gang" had already spent, with an additional overdraft of $1,250, during its six months in office. The health board requested minimal funding for at least the remaining six months, but supervisors, offended by municipal waste and corruption, trimmed the request to $2,500 per month, a drastic reduction coming at a time of potential emergency if bubonic plague surfaced in San Francisco. Even the dean of the University of California Medical Department, Arnold D'Ancona, newly elected supervisor and member of its hospital and health committee, reluctantly agreed to the starvation treatment.[23]

The San Francisco Health Board protested the "decapitation" but was forced to take radical measures. Most of the remaining money went to finance hospital operations, while all salaried positions were temporarily abolished.[24] Staff

reductions involved discharging food, plumbing, and sewer inspectors as well as ambulance surgeons and an assistant bacteriologist. Everybody, including the city's health officer, offered to continue working without pay for the remainder of the fiscal year. Given its budgetary constraints, the health board asked the federal quarantine officer for assistance in conducting future bacteriological examinations, as the city still lacked adequate animal facilities. In spite of previous tensions between local and federal health officials, Joseph Kinyoun agreed to help with laboratory investigations out of "professional pleasure to aid any physician in the search of knowledge," especially if it would protect the public health.[25]

The Lords of Chinatown

Since the 1880s, Chinese diplomats in the United States had played important leadership roles in the affairs of Chinatown.[26] The Qing government considered all Chinese migrating overseas to remain imperial subjects, regardless of their social status. The consulate's mission was to closely monitor these individuals using surveillance and control methods popular in the homeland. The central government primarily acted through diplomatic representatives—ministers and consuls—who in turn supervised local benevolent associations. Among the diplomats' primary goals were to ensure a measure of social cohesion and order in newly established communities fractured by clans and districts and to suppress immoral, criminal practices believed to fuel anti-Chinese sentiment in America.[27] The Burlingame Treaty enabled the presence of consuls at American ports, and the first Chinese minister in Washington, Chen Lan Pin, appointed a consul for San Francisco in 1878. Like a district magistrate in China, the consul's duty was to rule over his overseas subjects, protect them from mistreatment, and ensure their devotion to the empire. Endowed with greater freedom of action, consuls became much more powerful and visible. They focused on national issues, including treaties and trade. In San Francisco, presidents for the Six Companies and their forty-member executive committee became ex-officio members of the diplomatic corps and thus were expected to be loyal representatives of the emperor's official family. This meant working closely with local trade associations, import-export banks, and individual capitalists, employing their own network of informers and security personnel.

Newcomers to Chinatown, consular representatives originally commanded little sympathy. Their involvement in local struggles between the Sam Yup and

Sze Yup associations during the mid-1890s generated widespread resentment. Clearly siding with the merchant-dominated associations in Chinatown, Consul General Li Yung Yen faced a resolution from the Six Company leadership to leave his post in August 1895. The imperial government retaliated, with the consul authorized to threaten families of Sze Yup Association members in China with arrest and possible execution, a powerful intimidation tool repeatedly employed in subsequent years. In fact, in December 1896, word came from China that the Chinese government had confiscated property and imprisoned relatives of a cigar factory owner in Chinatown, actions that prompted a petition to the U.S. secretary of state to intervene with the Chinese minister in Washington who had issued the orders.[28]

By early 1897, the feud between Chinatown's rival associations reached truly international dimensions. Although their traditional custom in legal disputations was to seek a middle way through arbitration, the Chinese chose Western lawyers to plead for protection from the U.S. government, claiming that many Sze Yup members were Chinese Americans.[29] The Chinese diplomats, for their part, insisted that many of these individuals whose families were detained at home were actually traitors and revolutionaries, collecting funds for the overthrow of the imperial government. After a visit with the attorney general and President William McKinley in March 1897, a delegation of Sze Yup leaders reached a compromise with the Chinese minister, lifting their boycott of merchants and canceling lawsuits. The diplomat, in turn, promised to stop the harassment of their families in China and blamed the consular office in San Francisco for meddling.[30] The Chinese government's reaction was swift: both consul and vice-consul were summarily fired and the minister ordered to return home, facing an uncertain reception.

Chen Lan Pin's replacement in Washington was Wu Tingfang (originally Ng Choy). Wu had been born in Singapore but was raised in an Anglican College in Hong Kong and had studied law in London. In 1880, he became the first ethnic Chinese to become a member of Hong Kong's legislative council before leaving for China to join the modernization movement. Given his education and experiences with British authorities, Wu was superbly qualified to join China's diplomatic service, visiting Spain, Peru, and the United States in the early 1890s; he was known to the American public through his defense of Chinese immigrants and support of American investment in China.[31] The media duly acknowledged his regal arrival in San Francisco on the way to Washington with a retinue of sixty secretaries, assistants, and servants. Missing was his brother-

in-law, Ho Kai, who had declined the post of consul general in San Francisco. Instead, the minister managed to convince Ho Kai's younger brother, Ho Yow, to join him as a personal secretary and potential candidate for the consular post. Wu's brief stay in San Francisco allowed for a visit to Chinatown and discussions with the Six Companies and the Chinese Merchants Association. He also held talks with prominent Protestant leaders of Chinese missions, including Ira M. Condit, Frederick J. Masters, and William C. Pond. A legal scholar, well versed in Western politics and culture and a fluent English speaker, Wu was determined to improve China's international standing through modern reforms. Much was expected from his tenure in Washington.[32]

By September 1897, Chinatown welcomed its new acting consul general, Chang Yin Tang, together with Ho Yow, promoted by Wu to vice consul. Born in Hong Kong, Ho came from a large and prominent family in Guangzhou; his wealthy father was the first ordained Chinese minister of the London Missionary Society.[33] After a British education in his hometown, Ho completed his studies in Oxford and London before returning to Hong Kong to practice law. He was only twenty-eight years old at the time of his appointment and felt obliged to tell a reporter on his arrival in San Francisco that he had only accepted the post "for the glory and honor associated with the important position."[34] Ho was immediately assigned to investigate the smoldering dispute between the worker-dominated Sze Yup and the merchant-friendly Sam Yup associations. Soon, he arranged a successful truce that led to the reorganization of the Six Companies, demoralized after years of boycotts and violence.[35] He also advocated the dissolution of Chinatown's criminalized tongs and expressed his intention to expand contacts between the Chinese and surrounding populations.

Ho Yow's efforts meshed with Wu Tingfang's own policies toward disruptive brotherhoods. The minister was strongly lobbying the U.S. government to negotiate an extradition treaty with China that would allow for the forceful removal of dangerous gang members. In fact, China promised to assume the burdens of detection, repatriation, and punishment in the homeland. In the eyes of Chinese diplomats, these criminal elements were responsible for most of the anti-Chinese sentiment prevailing in America, and their successful removal would constitute a major step toward better relations. The proposal was a nonstarter, however; the United States was not about to surrender persons living within its borders to a foreign government for harsh prosecution and punishment without participation of its own police and judiciary.[36]

The departure of Chang Yin Tang for a new assignment in Cuba allowed Ho Yow to become acting consul. Shortly thereafter, Wu selected him for the permanent position. Although a novice, San Francisco reacted favorably to Ho's appointment. He was charming, a "good" Chinese, fluent in English. Tall, "distinguished in carriage and feature," and forever the affable and gracious diplomat, Ho quickly achieved social prominence, not only in Chinatown but also in local political, business, and cultural circles. Despite his youth, Ho's mandarin persona impressed members of San Francisco's elite holding membership in the Bohemian Club: "He possesses what few Asiatic attain, and that is an intimate knowledge of the subtle, restless Yankee mind," gushed one newspaper.[37]

Indeed, Ho's primary objective was to build new trade relations between the United States and China for the benefit of resident merchants. Residing in the Chinese consulate at 805 Stockton Street, a neo-Baroque style brick mansion built for a wealthy Frenchman, Ho was ready for serious business. A sign over the entry in Chinese characters read "Office for the Transactions of Matters related to the Great Pure Empire." His young wife and a nine-year-old son shared the living quarters, together with a retinue of maidservants, cooks, a cleaning woman, drivers, and an American governess. A secretary, two attachés, and a clerk dealt with consular matters. Soon after his appointment, Ho suggested the formation of a U.S.-Chinese trading company with the goal of developing American commerce with the Orient, a plan he submitted to the San Francisco Chamber of Commerce for consideration.[38]

Ho favored "a big syndicate," a company capitalized at $5–10 million, equipped with depots and agencies in Chinese treaty ports and other parts of the country to handle both natural products and manufactured goods. This was an ideal time since China currently favored the United States over England and Germany because of America's refusal to participate in territorial occupations like the European colonial powers. China was rich in natural resources, with oil fields, sugarcane, and cheap labor. There were concerns, however, that China would eventually produce and sell its products at a lower price, diminishing American exports.[39]

Efforts to enhance relations with the San Francisco community took a positive turn during the Fourth of July celebrations in 1899. With special permission from the Chinese minister in Washington, Ho organized a Chinese pageant for the traditional parade down Market Street. Sparing no expense, and with the support of the Six Companies, Chinatown was able to display its entire Oriental splendor for the first time in fifteen years. Hundreds of Chinese, clad in their exotic

costumes, together with dozens of carriages conveying the district's leading merchants, lined up with orchestras and players from the Chinese theater. The shrewd Ho, "spick and span, in silk, satin and velvet" presided, and the local newspapers spent a fair amount of ink describing this most successful public relations ploy.[40]

In January 1900, Ho Yow tried to mediate the new outbreak of violence among warring brotherhoods in Chinatown that intimidated the ailing Wong Chut King. In statements to immigration authorities, he made it clear that no real progress in international trade would occur until this problem was solved.[41] Ho issued a proclamation, advising the tongs to cease their campaign of intimidation and violence or be handed over to the San Francisco authorities for arrest and prosecution. The "highbinders" resented his intervention, and there were rumors that assassins were observed in front of the consulate threatening to kill Ho and other members of his household.[42] Ho outwardly expressed no alarm; he always traveled with bodyguards and also engaged detectives to gather intelligence in the district, threatening to retaliate against gang members' families living in China.[43]

Despite his scare tactics, Ho realized that the warnings were only a temporary fix. Vice failed to diminish; language schools created to teach Confucian ethics ran short of funds; and education had no tangible effects on Chinese behavior far from home. Efforts to control Chinatown's ordinary dwellers ultimately would not be successful. Presiding over an unruly "colony" of poor and uneducated bachelors was not easy. Unlike in China, there were no effective deterrents, and there was no legal system capable of issuing draconian punishments. Workers were increasingly disappointed and restless, and he was the official representative of an increasingly despised Chinese government. Aware of the challenges, both Minister Wu Tingfang and Consul General Ho Yow were ready to use all their powers to counter discrimination and promote the modernization of China through further exchanges with the United States.

Partner or Foe? The Governor and the State Health Board

Originally from New York, William T. Gage came to California in 1874 to raise sheep before opening his Los Angeles law office in 1877. Among its more prominent clients was the Southern Pacific Railroad. Elected attorney general of that city, he lived with his wife and children on a farm near the town of Downie in southern California. Because of an increasingly hostile Republican majority in the state legislature, bent on cutting funds and preventing the regulation of

California's rail monopolies, James H. Budd, the Democratic governor since 1895, decided not to seek reelection.[44] Gage's selection as a compromise Republican candidate in 1898 came through the support of William F. Herrin, a senior lawyer for the Southern Pacific Railway and its political machine. Another sponsor was Michael H. de Young, owner of the *San Francisco Chronicle,* a Republican newspaper. Also working on Gage's behalf was Daniel M. Burns, a widely influential mining and timber tycoon and chair of the Republican state committee overseeing patronage.[45] During the campaign against the Democratic candidate, Congressman James G. Maguire—a former San Francisco judge—Gage promised a businesslike administration unhampered by corporate influences.[46] Both Gage and "Colonel" Burns remained fierce political adversaries of James Phelan, the mayor of San Francisco.[47]

Elected to office by a slim margin, Gage assumed the governorship on January 5, 1899, for a four-year term. His election confirmed the growing popularity of the Republican Party and consolidated the power of the Southern Pacific in the affairs of California.[48] During his first legislative term, Gage sought to control the press by signing bills that required newspapers to print only signed articles if they questioned the integrity, honesty, or reputation of the highest state official. Like San Francisco's city charter, Gage's business-friendly platform characterized former state appropriations and administrative expenditures as extravagant; he also supported American imperialism and stressed the need for an expansion of California's Asian commerce. In this regard, the governor expressed a keen interest in improving San Francisco's port facilities.[49]

The State of California already maintained its own health board, appointed by the governor with the consent of the legislature. This body had been created in 1870 with the appointment of Thomas M. Logan, originally from South Carolina, who practiced medicine in Sacramento following his arrival during the gold rush.[50] Logan became the first secretary and executive officer of the board—the second established in the nation, following Massachusetts—a body that eventually came to have seven physician members, one of them elected president and another secretary. Members usually served four-year terms without pay. Logan was very interested in public health issues and became a force in proposing the establishment of a National Health Council and supporting the creation of the American Public Health Association. One of his first actions in 1870 was to commission a study of Chinatown's sanitary conditions.[51]

In early 1900, Governor Gage's California State Board of Health was led by Charles A. Ruggles from Stockton as president and William P. Mathews of Sacra-

mento as secretary. Other members included Andrew M. Henderson and Louis Bazet from San Francisco. Governor Budd had appointed both Ruggles and Mathews in 1897; Ruggles was a veteran surgeon who had practiced in California for more than 25 years and, more recently, was employed by the Southern Pacific Railway; Mathews had also spent a quarter century practicing medicine in Sacramento. Relations with local health boards were usually cordial, with the state board simply functioning in an advisory capacity unless an epidemic or other imminent health danger threatened to overwhelm local jurisdictions. In such situations, the state board could intervene and establish quarantines if local responses were deemed inadequate. To fund such public health measures, the California legislature passed an emergency act in 1893, during another cholera scare, creating a $50,000 fund for use in such a crisis. In September 1899, the state health board made national headlines when it unanimously passed a resolution to prevent persons suffering from tuberculosis to lodge in California hotel rooms or attend social and religious functions unless they were properly isolated to protect the public.[52] The proposed quarantine, involving medical examinations at the state's borders, quickly encountered resistance in mercantile circles. The business community viewed such measures as a meddlesome interference that would discourage new immigrants and tourists from coming to California.[53]

On January 3, 1900, Governor Gage called a special legislative session to consider a large number of bills. Among them were items designed to improve the competitiveness of San Francisco's port in anticipation of increased trade with Asia. Along those lines, Gage wanted to revive the State Quarantine Service, which the San Francisco Health Board, newly empowered under the city charter with jurisdiction and control over port operations, had abolished. The cancellation left the screening of incoming ships entirely in the hands of the federal Marine Hospital Service. The governor also unveiled legislation that would have allowed him to personally remove any state appointees, including health officials. This measure was a transparent attempt to nullify Phelan's health board choices, made in accordance with San Francisco's charter. However, the legislature adjourned before action on these bills could be taken.[54]

The State Quarantine Service had a long history. Checking incoming vessels for disease began in 1884 when the San Francisco Health Board hired a state-sponsored quarantine officer to confront ships entering the Golden Gate. Every captain and ship surgeon was required to report the presence of contagious disease on board during the passage from Asia.[55] Many ships had been placed

in quarantine. Although the state health code specified that this office was responsible for preventing the introduction of foreign diseases into California, the position carried little power and commanded slim resources. A small fraction of the San Francisco Health Department's budget, $3,000, was allowed for this combined city and state quarantine unit, paying the salaries of an officer and two staffers and maintaining their small patrol boat. As a result, the quarantine officer lacked a disinfection apparatus and facilities for the detention of suspected crew members and passengers; these men had to be transferred to other quarantine vessels leased from shipping companies and anchored in the bay, where they remained for the maximum period of fifteen days to rule out incubation for contagious diseases such as smallpox.[56]

The opening of a federal quarantine station on Angel Island in April 1891 created another set of inspections, detentions, and disinfections of incoming vessels that competed directly with the existing California service. Henceforth, incoming vessels were also boarded at the Golden Gate and, if necessary, diverted to the Angel Island anchorage before entering the port of San Francisco. Not surprisingly, competition between federal and state quarantine officers led to frequent clashes, as rival tugs raced to meet each incoming vessel. Both officials went over the ships' manifesto, checked reports of possible illness on board, and issued clearances.[57] This obvious conflict of authority was settled following passage of the National Quarantine Act in February 1893, when President McKinley empowered federal quarantine officers to issue bills of health required by the collector of customs for disembarkation.[58] Discussing the situation years later, health board member John M. Williamson considered the federal intervention "piratical," its tactics "buccaneering," a clear violation of California law. He suggested that all local supervision be transferred to the state health board, which was better equipped to fight for its rights.[59] Like other "plums" in state government, the state quarantine assignment was a "spoils" office for a physician who, in spite of its measly salary, managed to substantially increase his earnings from private practice. In fact, one of them, William P. Chalmers, used his "ornamental" post to blackmail ship owners so that he could collect fees for attending to crews of incoming ships.[60]

Gage deeply resented the federal intrusion. Six months after assuming office, the governor and his state health board appointees plunged headlong into a bitter confrontation with the recently arrived Joseph Kinyoun. Chalmers continued to inspect incoming vessels, though he would soon be replaced by I. E. Cohn.[61] The *Nippon Maru* incident in June 1899 not only triggered a controversy between the

San Francisco Health Board and Kinyoun about the possible presence of plague; it also exacerbated the antagonism between state and federal quarantine officials. Unlike his predecessors, Kinyoun refused to admit Chalmers and Cohn to his station facilities, except on the condition that they remain in quarantine with the passengers.[62] San Francisco health officials retaliated, issuing their own quarantine orders, delaying the discharge of cargo, and decreeing that anyone disembarking from the suspected plague ship would be immediately detained and conveyed to the local pesthouse. With the feud between officials, port activities turned chaotic: cargo remained unloaded, passengers were inconvenienced, and commerce was disrupted. Clearly, the two-tiered quarantine system negatively affected trade, with shippers increasingly unwilling to send their freight through the local port.[63] The headline in one local newspaper, "San Francisco Trade Going to Vancouver," created further jitters.[64] No one knew how to settle this conflict of authority. Business interests and even the state legislature preferred to have the federal quarantine officers assume sole responsibility. The Phelan health board found a temporary solution. Given its extreme budgetary crisis, it summarily abolished the quarantine officer position, bequeathing the problem to the State of California and its "spoil seekers."[65] Predictably, because of his loss of power and patronage, Governor Gage was furious with the federal quarantine officer and the San Francisco Health Board and began quietly plotting a response.

"Warriors of Epidemics": The Marine Hospital Service

Even before America's war against Spain and the occupation of Cuba and the Philippines, the Marine Hospital Service widened its functions for guarding the nation's borders against diseases such as yellow fever, cholera, and plague. The service, created in 1798, was originally designed to provide care to sick and injured merchant seamen in hospitals located in prominent ports along the Atlantic seaboard. Subsequent reorganizations, however, created an expanded system headquartered in Washington, DC, and administered by the U.S. Treasury Department. Recast into a paramilitary organization with a commissioned corps of physician-officers under the direction of a supervising surgeon,[66] the service assumed additional responsibilities for preventing the entry of infectious diseases into the United States.[67] Such an assignment, based on the National Quarantine Act of 1878, occurred in response to devastating yellow fever epidemics, which had demanded intervention in accordance with federal obligations for the

regulation of interstate and international commerce.[68] In August 1888, President Cleveland signed a bill for the construction of seven new federal quarantine stations to be located at strategic checkpoints on both the Atlantic and Pacific coasts. These outposts would be equipped with facilities to screen arrivals and detain, for further evaluation, those suspected of suffering from infectious disease. Ships reporting sick passengers and crewmembers were to be disinfected, together with their cargo. This role became particularly important in the early 1890s because of increased maritime arrivals, especially from Europe. Service officials were prominently involved in the inspection of immigrants and could exclude those with signs of physical or mental disease.[69]

The National Quarantine Act of 1893 created an early warning system and set strict rules for the movement and inspection of ships. It authorized the Marine Hospital Service to detail officers to consulates in foreign ports, where they checked passengers before departure to the United States and issued consular bills of health. The legislation also enabled further inspections, disinfections, and quarantines at ports of arrival and the preparation of health certificates for every arriving vessel for the collector of customs.[70] Similar screening occurred at land borders. To avoid jurisdictional disputes, the act demanded that officers examine existing quarantine laws at both the municipal and state levels and cooperate with their implementation. Only if local legislation was judged to be insufficient or inadequate was the Treasury secretary, with support from the president, "empowered to make additional rules."[71] Lack of precision about local "deficiencies" and the degree of "cooperation" expected left federal authority contested, triggering disputes that affected officials at all levels of government. Even before the Honolulu plague outbreak, uniformed federal quarantine officials sought to patrol the borders aggressively, displacing or ignoring state and local officials.

By the mid 1890s, the early consular warning system was set, and a ring of new quarantine stations dotted the coastline from Boston to Seattle. Driven by America's fledgling imperialism, Congress passed legislation conferring greater powers to the Marine Hospital Service to protect against the importation of disease. However, its expansion and very existence were on the line when Congress considered in 1897 the creation of a national public health entity that would have incorporated the service's duties, medical research, and vital statistics.[72] Another such attempt occurred in 1900, but Walter Wyman, currently the supervising surgeon general, feared losing power, prestige, and patronage. He argued strenuously against any administrative reorganization, insisting that such legislation

would adversely affect the work of his officers.[73] By 1905, his Marine Hospital Service, which in 1891 had 54 officers and a budget of $600,000, would virtually double, into an international bureaucracy with 135 medical officers and expenditures above a million dollars.[74]

Wyman, a graduate of Amherst with a medical degree from St. Louis Medical College, joined the Marine Hospital Service in 1876, serving in several hospitals before studying briefly in Europe and becoming acquainted with the latest bacteriological discoveries. He supported the establishment of a hygienic laboratory at the Marine Hospital in Staten Island and became its first director in 1887.[75] Appointed to lead the service in 1891, Wyman took the reigns of power with great energy and passion, becoming a compulsive but effective micromanager and strict disciplinarian who exploited the military structure of his domain with new rules and procedures. A bachelor, he was punctilious about uniforms, spending time on all aspects of clothing, including the design of uniforms, epaulettes, and buttons.[76] Arriving at his command post, Wyman faced each morning a package of newspaper clippings, together with official and confidential letters and telegrams from his officers stationed around the world, providing him with an up-to-date panorama about the movements and impacts of contagious diseases that potentially threatened the United States.[77]

Wyman's mission was pompously described as "warding off at the very gates and portals of the national life the scourges which threaten to descend upon the Western shores from the dense and vitiated populations from the Orient and of Southern Europe."[78] Although the supervising surgeon general characterized past European quarantines as old-fashioned and absurd, modern ones remained effective, "providing a powerful shield against Asiatic plague invasions."[79] Subordinates viewed Wyman as a zealous martinet but admired his political acumen; he moved the service headquarters to the Butler Mansion near Capitol Hill to keep in close touch with legislators, impressing them with his latest epidemiological intelligence and announcements of new advances in medical science.

By the late 1890s, the service began focusing on the bubonic plague and its gradual movement across the Pacific. The 1897 International Sanitary Conference in Venice had adopted protective measures against plague, based on previous actions to stem the diffusion of cholera, but the U.S. government refused to approve them. A worldwide system of surveillance and international reporting began to track the path of the disease. Ships and their cargoes, crews, and passengers leaving infected ports were detained, inspected, and disinfected. Each government was authorized to restrain ships' movements by adopting these

measures for certain classes of people who were believed to pose a special risk for conveying the dreadful plague. In spite of the heightened alert, Wyman, who had recently published a pamphlet on plague, remained extremely confident about the abilities of his service to prevent the disease from taking hold in the United States.[80]

The quarantine station, opened in 1891 on Angel Island in San Francisco Bay, featured a modest wharf, boathouse, laboratory, officers' quarters, and an isolation and disinfection facility. Sitting on a ten-acre plateau surrounding a protected cove, the site was removed from ship travel and human habitation.[81] In 1896, Wyman sent a competent bacteriologist, Milton J. Rosenau, to take charge. His mission was to redouble efforts to screen Asian passengers and baggage. Like his predecessors, Rosenau repeatedly clashed with Chalmers, the state quarantine officer, triggering protests from state and local authorities. President McKinley finally ended the feud in 1897 by directing the Marine Hospital Service to take full charge of all screening functions.[82] In spite of the jurisdictional quarrels, Rosenau's relationship with the San Francisco medical profession and the press remained quite cordial. He allowed reporters to periodically visit his small bacteriological laboratory, and local readers became acquainted with the world of microbe hunters, with their flasks, incubators, and collections of carefully sealed culture tubes growing a variety of lethal germs.[83]

Rosenau's successor, Joseph J. Kinyoun, considered one of the most prominent members of the service, arrived at Angel Island Station on June 11, 1899, a cold, foggy day.[84] Originally from North Carolina, Kinyoun joined the service after obtaining his medical degree from Bellevue Hospital Medical College in 1882. Locals reassuringly interpreted the assignment as evidence that Wyman and the federal government were determined to protect San Francisco from an expected invasion by the plague.[85] Kinyoun was, after all, one of new Pasteurians, a man who had visited the temples of modern bacteriology in Europe, the laboratories of Robert Koch and Pierre E. Roux. More recently, Kinyoun, who also had a doctorate in bacteriology, had directed the service's prestigious hygienic laboratory, now transferred to Washington, DC, while holding a professorship at Georgetown University.[86] Inventor of the Kinyoun-Francis sterilizer, a shipboard disinfecting machine designed for use at quarantine stations, Kinyoun seemed a logical choice to head the federal fortress protecting the Golden Gate against disease in dangerous times. Little did San Franciscans suspect, however, that the presence of this distinguished federal quarantine officer in their midst was primarily the result of political intrigues in the nation's capital.

In a private letter, Kinyoun interpreted his sudden transfer as a form of banishment, as he confided to relatives, "making place for those who have axes to grind where canting sycophants are esteemed and set in high places,"[87] suggesting that the reasons for his new assignment were rooted in Wyman's professional jealousy and desire to surround himself with more pliable and loyal acolytes.[88]

Not surprisingly, the exiled Kinyoun found his Siberian bulwark against the plague on Angel Island somewhat tattered.[89] No improvements had been made for five years. In fact, there was not even a working telephone line to the mainland. Spurred by Kinyoun's complaints and influenced by some inconvenienced passengers, Congress approved repairs to the station with a price tag of $137,000. By the end of 1899, the facilities on Angel Island were among the best in the world. With Wyman's blessing, Kinyoun expected to resume laboratory research in addition to his quarantine duties. Shortly after his arrival, however, the prideful "warrior of epidemics" made a serious diplomatic error that affected the rest of his tour of duty in the Bay Area. The *Nippon Maru* incident in the summer of 1899, particularly Kinyoun's ridicule of San Francisco Health Board members and William Barbat, the young city bacteriologist, set a bad precedent with the San Francisco medical establishment. Resentful and determined to prevent any interference with his duties, the federal officer also employed a confrontational approach toward Chalmers, his California counterpart, threatening him and his successor with quarantine. This display of arrogance and lack of compromise cast a shadow on future dealings with California's powerful and wily governor and the influential political machine that supported him.

"Playing with Ink": Western and Chinese Journalism in San Francisco

In general, San Francisco's newspapers remained indifferent to the plight of Chinatown and its population, except for detailed reports on crime, vice, and lack of sanitation. Reporting on sanitation not only helped construct the perception of Chinese migrants among San Franciscans but also colored racist public health rhetoric concerning the risks posed by the continued Chinese presence in the city. Influenced by political ideology, business interests, and contemporary scientific insights, the local press offered conflicting narratives of events in Chinatown and their impact on San Franciscans. Most publications took issue with public measures devised to prevent disease outbreaks, explaining their purpose and implementation within competing frameworks and partisan spin.[90]

Stories about the filth in Chinatown and the threat of bubonic plague helped sell newspapers. Because of their owners and editors' political orientation and involvement, publications enhanced and sensationalized events to feed the appetite of their eager readers. This kind of "yellow" journalism, with its use of large and provocative headlines, titillating illustrations, and emphasis on vice, crime, and entertainment, sought to attract readers from all social classes.[91] Most yellow newspapers also engaged in campaigns against the powerful and influential, expressing sympathy for the underdog. Anonymous sources and fictitious interviews often supported melodramatic stories of political intrigue.[92]

The foremost daily newspaper was the conservative Republican, anti-Chinese *San Francisco Chronicle,* owned by Michael H. de Young with his brother John P. Young, who served as managing editor.[93] Although the governor of California betrayed Michael and denied him a chance to become California's second senator, his brother John maintained cordial relations with Gage and was selected to be one of his representatives for negotiations with President McKinley. The newspaper strongly opposed the Democratic Phelan administration and engaged in a campaign against municipal corruption and waste. In its pages, the mayor's handpicked health board appointees were routinely derided as "tax eaters" and scoundrels. John P. Young considered the presence of Chinatown a necessary evil, its residents deserving "to stew in their own filth."[94] A morning newspaper, the *San Francisco Chronicle* presented local stories in great detail; its reporters roamed the city and generously quoted their sources. Pretending to despise "yellow journalism," its tone was more sober and topically objective, with descriptive headlines and meager illustrations.

The main morning rival, with the largest circulation in California, was the *San Francisco Examiner,* owned by William Randolph Hearst, with Thomas T. Williams as business manager.[95] Its association with Hearst's *New York Journal* provided it with national exposure.[96] Supportive of labor unions and therefore also strongly anti-Chinese, the *San Francisco Examiner* leaned toward Democratic issues and supported the party's political candidates. It promoted Phelan and the city charter as part of its crusade for more effective city government, but, strongly pro-labor, the newspaper came to distrust the new administration's increasingly pro-business policies. Many reports excoriated gambling and exposed corruption in the ranks of San Francisco police. To attract attention and boost circulation, the Hearst "saffron sheet" steadfastly printed shocking headlines and stories with florid prose. Ruthless politicians, greedy bankers, corrupt policemen, slick lobbyists, and pretty vamps shared the limelight with spectacu-

lar accidents, ship and train wrecks, explosions, murders, divorces, and far-away battles, illustrated with maps, drawings, and photographs.[97]

In 1895, a well-known local businessman and moderate Republican, John D. Spreckles, became publisher of the *San Francisco Call,* an evening newspaper with a distinguished ancestry, which included participation of writers such as Mark Twain. Originally from South Carolina, Spreckles's family had come to San Francisco to promote the sugar trade with the Hawaiian Islands. Under his direction, the paper became a mouthpiece for its owner's interests in foreign trade and transportation. Competitor Hearst characterized the *Call*'s editorial staff members as "lackeys of the plutocracy." Like the *Examiner,* the *Call* displayed some flourish when describing the local scene. It featured some of the best illustrations and cartoons; some of its maps detailed Chinese escape routes across rooftops to evade quarantine lines.[98] During the plague outbreak, Spreckles invited a distinguished New York physician, George F. Shrady, to investigate the plague outbreak. Wined and dined by contending politicians, lawyers, and physicians, the medical staff reporter for the *New York Herald* wrote a series of contradictory reports, satisfying no one.

Fremont Older, a long-term Republican "capitalist," became managing editor of the *San Francisco Bulletin,* a smaller, daily evening newspaper, in 1895. The *Bulletin* often launched its own exposés of municipal corruption but supported some of Phelan's reforms because of its owner R. A. Crothers's personal connections. With a famous staff of writers that included Robert Ripley and Rube Goldberg, the paper soon acquired the largest circulation of any afternoon newspaper west of Chicago. To attract readers, this organ also used large-type headlines, popular themes, and abundant illustrations. When dealing with Chinese subjects, the racist drawings routinely featured small, urchin-like Chinese, with captions written in broken English to simulate their dialogue. In one example, under the headline "Sulfur smoked Chinese objects," a perplexed man appears in underwear, his pants burned off his legs from exposure to disinfectants.

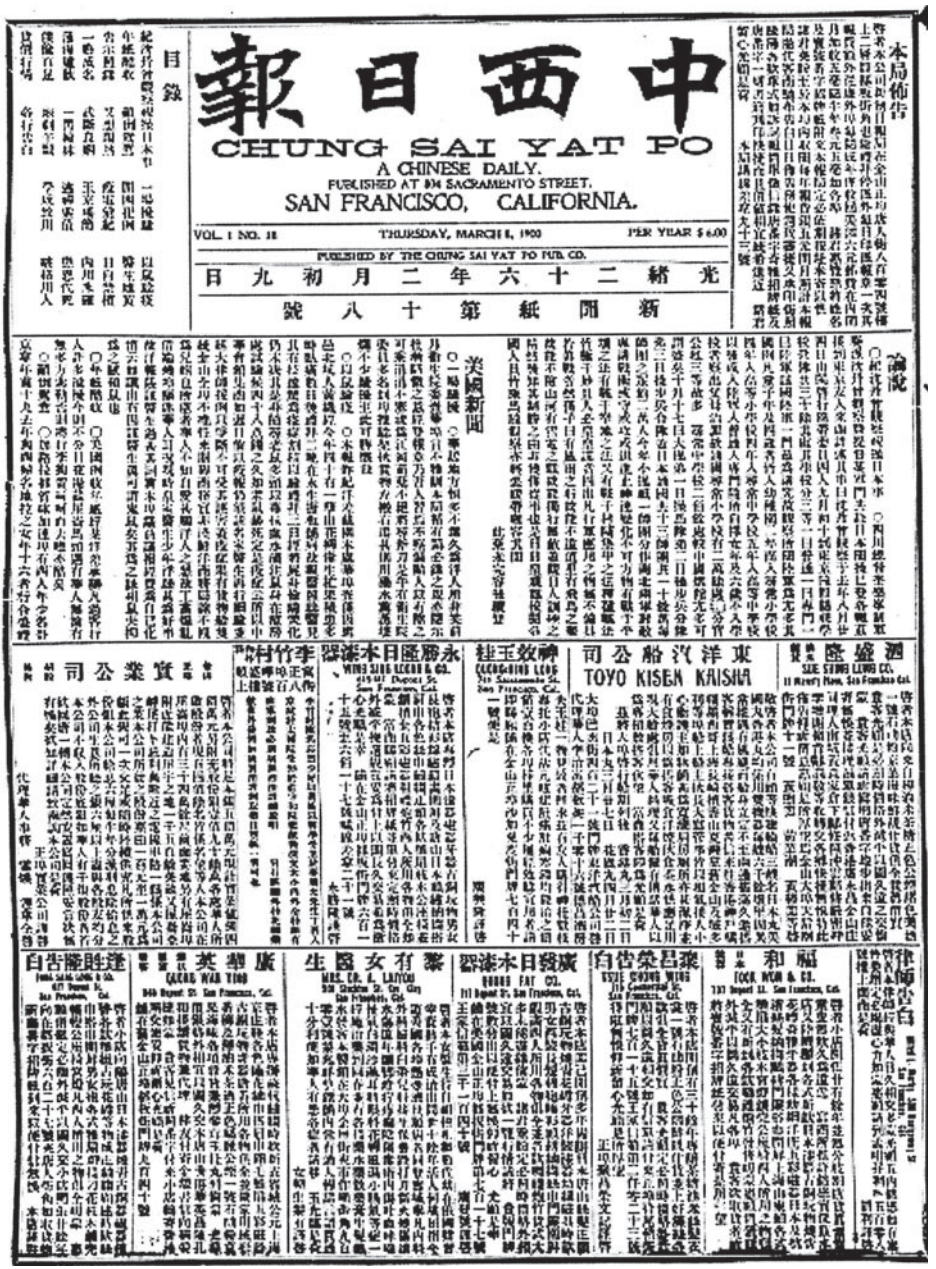
Outside the Bay Area, Sacramento's *Evening Bee*, originally a morning newspaper, had been active since 1857. Partially owned by James McClatchy, an Irish immigrant who had worked at the *New York Tribune,* the *Evening Bee* became firmly entrenched in Sacramento by 1900 under the editorship of McClatchy's sons, Charles Kenny and Valentine Stuart.[99] Its location allowed the publication to offer an independent perspective on events in San Francisco, unencumbered by local political partisanship and business interests. Moreover, its proximity to the center of state government attracted investigative reporters, providing a

valuable window into the machinations of Governor Gage, the state legislature, and the at times tempestuous relationship with the federal government. The *Evening Bee* focused on government and business corruption and was opposed to the political influence exerted by California's railroad companies. Its fairly unbiased reporting on the plague epidemic became a valuable source of information and friction with local and state health officials.

Since its inception, Chinatown and other California communities supported a number of daily newspapers written in Chinese. Some migrants were capable of reading Chinese newspapers, pamphlets, and posters, which allowed them to follow developments at home, as well as in California and San Francisco.[100] Typesetting remained quite laborious and expensive. At a minimum, a Chinese publication required between twelve and fourteen thousand characters.[101] Financial support for publications came from local investors, subscribers, and advertisers, but most periodicals were short lived.[102]

A new Chinese-language newspaper, *Chung Sai Yat Po* (*Chinese Western Daily*), began publication in San Francisco in early 1900, attempting to represent Chinatown's more affluent, literate leadership. The founder, publisher, and editor was Ng Poon Chew, originally from Guangdong province. After arriving in the United States, Ng converted to Christianity and went to missionary school in San Francisco. After brief careers as a Presbyterian minister in the city and a newspaper reporter in Los Angeles—he founded the weekly *Wa Mi San Po* there in 1898—Ng came back to the Bay Area at the invitation of business friends. Among his advisers was Professor John Fryer, whose academic position and American perspective lent legitimacy to the enterprise. With the help of roving reporters and close ties to the merchant elite in Chinatown, Ng Poon Chew enjoyed "playing with ink"—a Chinese expression for writing. He espoused Western middle-class values and Republican ideas, making no secret of his sympathy with reformers (the Chinese Empire Reform Association) and their efforts to modernize China.[103] He frequently criticized the unrealistic cultural pride of his readers, a burden he felt needed to be relinquished for the sake of improvements.

The first issue of *Chinese Western Daily* appeared on February 16, 1900, during the Chinese New Year. The newspaper came out in the afternoon because of the arduous and time-consuming typesetting: eight men worked manually for nearly twelve hours just to prepare the pages for print. Ng's stated goal was to acquaint his fellow Chinese with many aspects of American life and values: "living among foreigners, our readers need to know what to follow and what to avoid, because American laws are becoming increasingly more oppressive against Chinese."[104]



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Ng wrote in a vernacular Cantonese style, with idioms and metaphors that differed from the elite classical style (*wenyan*), thus connecting with an audience of readers largely from coastal Guangdong province. The articles were written without punctuation and paragraphs, with occasional typesetting errors such as missing characters.

The daily paper consisted of four pages, with nearly half of the space devoted to advertisements located at the bottom of every page. Each issue carried two dates of publication: the English one and another listing the day and month of the Chinese lunar year together with the reigning year of the current emperor. Early on, the newspaper announced that it would follow the style of Western periodicals and divide the news into three separate sections: American, international, and Chinese. Sections varied in size and location depending on the importance and availability of news. "We will omit nothing on events happening in China, especially from Guangdong and Fujian, because we know how deeply our readers are attached to the motherland," read the first announcement. However, the newspaper stated, "we will be particularly attentive to news from American and other Western countries."[105]

The top portion on the front page was often reserved for editorial comments, written by Ng or one of his assistants. The tone was paternalistic, frequently scolding readers for their passivity and indolence. The newspaper promised to report and fully translate all negotiations and official communications between China and foreign countries as well as dealings between Chinatown leadership and American officials. If possible, imperial decrees, memorials, and proclamations would be published in their entirety. The first issue contained fifty-nine advertisements, from banks to fortune-tellers, herbalists to household goods. Sixty-one percent came from non-Chinese individuals, banks, and business establishments in Los Angeles, Ng's previous residence. Nearly 20 percent were health-related, including a daily announcement for the new Tung Wah Dispensary and ads from Chinese practitioners, dentists, and purveyors of herbal remedies.[106]

Deng Yiyun, a staff writer who closely reflected Ng Poon Chew's ideas, penned the newspaper's inaugural editorial. This manifesto explained the need for Chinese people to read newspapers. China was a superior country, its people industrious and intelligent, its heritage rich, its accomplishments admired by all other nations. Yet, Nature spread her endowments to mankind across the globe creating other nations, now separated by prejudice and change. Living in isolation, the Chinese failed to acknowledge this global expansion. However,

following the emperor's failed modernization effort in 1898, China became painfully aware of her ignorance concerning the rest of the world. To keep abreast of foreign lives, ideas, and activities, Deng echoed Ng in arguing that there was no better vehicle than reading periodicals. Every overseas Chinese living in America, "however common and insignificant," was, like the emperor, responsible for learning about Western, and especially American, affairs for the sake of his motherland as well as for his own benefit.[107]

Ng frequently employed animal imagery, a rhetorical tool that uses animals as symbols for explaining human qualities and behavior. Although traditional, such symbolic dehumanization was particularly popular in Chinese discourse during the late Qing dynasty's upheavals, providing the disempowered with a cathartic substitute for violent behavior.[108] In a speech, Ng Chew Po characterized the U.S. Immigration Service as "pig-headed" and its inspectors "oyster-brained."[109] Americans were often represented as vicious predators, tigers or wolves, acting either alone or in packs, bent on devouring Chinese people.[110]

As part of its educational mission, the *Chinese Western Daily* also sold books in both Chinese and English. Reflecting Ng's political leanings, titles like the *Qingyibao*—a collection of articles from a Beijing newspaper advocating reform—appeared on the list, together with a popular pamphlet, "Prescription for Common Disorders," designed to assist ailing bachelors interested in do-it-yourself approaches to healing. The newspaper also distributed geographical charts and calendars equipped with conversion tables that would allow readers to compare Chinese and Western dates. Schedules of ship arrivals and departures for China, together with English-to-Chinese study sheets, were meant to build bridges between East and West.[111]

Eschewing the sensational journalism practiced by some of the English-language newspapers in San Francisco, Ng's publication lent voice to the Chinese merchant class, challenging discriminatory official measures, encouraging resistance, and reporting on spontaneous protests and legal maneuvers. The pivotal role of reporters was to interpret and render English texts into Chinese for a Cantonese audience, using a style and language to describe places and events that harmonized with their epistemological system. Basements were called "mud cells," officials and policemen were "clerks," health officials became "royal physicians." Since it appealed largely to the elite, the *Chinese Western Daily* probably failed to influence ordinary residents.[112]

The *Chinese Western Daily* was not the only newspaper printed in Chinatown. During the plague years, there were two additional Chinese periodicals, the

Mon Hing Yat Bo (*Chinese World*) and the daily English-language *Oriental and Occidental Press*.[113] The former was a weekly publication until 1901, when it appeared daily. Its publisher was Tong Kai Chong, the local leader of the Empire Reform Association, which sought to raise funds for an army that could overthrow the Empress Dowager.[114] No data are available about Chinese literacy or figures concerning the newspapers' circulation. Nevertheless, the number of advertisements placed in the pages of the *Chinese Western Daily* between 1900 and 1905 more than doubled, shifting rapidly from Los Angeles sponsors to ones from San Francisco. Health-related ads still crowded the pages, remaining about 20–25 percent of all promotions. Chinese newspapers unquestionably succeeded in their mission to communicate and supply information to their Chinatown readers, employing a single written language that lessened their geographical isolation and contributed to their cultural coherence.[115] Above all, by representing the world outside Chinatown, the papers hoped to prod its residents from isolation to participation.[116]

Early Scenes of Terror

March–June 1900

> Chinatown is in a desperate condition and its residents in a panic. Now we hear that we are to be banished to a far-flung deserted island . . . we are at a critical point and sincerely hope that Your Honor will find ways to save us from disaster.
>
> —PETITION FROM THE SIX COMPANIES TO THE CHINESE MINISTER IN WASHINGTON, DC (JUNE 1900)

Roping Chinatown: First Plague Diagnosis and Quarantine

On Wednesday, March 7, 1900, Chinatown's early risers, including cooks, waiters, servants, and porters heading for their jobs outside the district, discovered that ropes encircled the space between Broadway and California, Kearny and Stockton streets. Two policemen on every corner demanded that everybody turn around and return to their homes.[1] Non-Chinese trapped in the district were rounded up and allowed to leave. Traffic was blocked in and out of Chinatown, and streetcars crossing through the area were not allowed to stop. At first, the isolation and presence of police were interpreted as a punitive measure, part of a dragnet designed to arrest feuding gang members. Angry outside employers flooded Chinatown's central telephone station attempting to contact their missing servants. Massive confusion ensued as frantic Chinese escaped across rooftops or sneaked through the lines, fearful that their absence at work would trigger dismissal.[2]

In the confusion, Chinatown stores closed, but provisions were passed across the lines. The quarantine hampered the movement of Western physicians living

Police quarantine cordon established around Chinatown following the death of Wong Chut King.
New York Journal, March 18, 1900.

outside the district, preventing them from attending the sick at the Tung Wah Dispensary. George L. Fitch, the dispensary's director, was barred from entering without special permission from the San Francisco Health Board.[3] Merchants were not given access to the customs house and allowed to retrieve their imported goods; Chinese passengers could not board river and coastal steamers to leave the city. Many managed to cross the bay in small boats and find shelter in the laundries and vegetable gardens of suburban friends. Others hid with Chinese cooks in private residences. Crowds quickly assembled in the streets, stunned by the encirclement.[4]

Informed that a man had apparently died of plague, many residents were puzzled to observe local physicians and policemen checking to see if anyone else was infected. Workers quickly sprayed formaldehyde around the Globe Hotel and undertaker's shop where Wong Chut King had died to neutralize disease-producing agents. In doing so, the San Francisco Health Board followed the traditional response of sanitarians to a highly contagious disease: quarantine the area considered infectious and search for all persons suspected of contact with the sick, removing them to isolation facilities. The Chinese seemed baffled by the notion of isolating the entire district. In their opinion, people did not carry this scourge; rather, it arose from poisonous vapors generated in the soil by seasonal

changes. In China, plague outbreaks were also conceived as divine punishments and triggered parades and processions to drive away the evil pestilence with noise from beating gongs and drums, ringing bells, and shooting fireworks. Indignation mounted, with "hairs standing and eyes splitting," in the words of a common Chinese metaphor. Yet, rather than respond forcefully, people aimed for a restoration of harmony. For most Chinatown residents, the quarantine represented an intimidating display of force, an operation designed to impress upon the district's population that the local health department and police were doing their jobs.

Notified about the presumptive presence of plague in Chinatown, Surgeon General Walter Wyman wired a message to James Gassaway, the medical officer of the U.S. Marine Hospital Service stationed in San Francisco, asking him to persuade the city health board to immediately inoculate all inhabitants of Chinatown with the Haffkine prophylactic, a vaccine recently developed in India.[5] Individuals already exposed to or suffering from signs of the disease should receive doses of Yersin's anti-pest serum.[6] Based on experiences with plague epidemics in India and China, this dual approach had become standard.

Not surprisingly, the Republican press immediately went on the offensive, complaining that the health board's plague diagnosis was simply a replay of the earlier *Nippon Maru* episode engineered six months earlier to scare the community and "raid the city treasury" by alleging an epidemic emergency. Suspicions lingered that the local health authorities were anxious and perhaps willing to manufacture plague cases without regard to the implications of such a determination for the people and business interests of the city.[7] Such misgivings quickly engulfed the initial diagnosis of Wong Chut King's cause of death. The *Chinese Western Daily* pounced on the creeping doubts, characterizing city bacteriologist Wilfred H. Kellogg as "an impulsive and arrogant young man eager to create trouble." In a display of Chinese animal imagery, he was portrayed as an insatiable "fat rat," spoiling the fruit of people's labor.[8] Both Chinese practitioners who had attended Wong insisted that the poor laborer had died of a venereal ailment.

Distrustful San Francisco notables requested that two prominent local bacteriologists, Henry L. Ryfkogel and Douglass W. Montgomery, independently review the available evidence. A native Californian, Ryfkogel had graduated from the University of California Medical Department and after 1897 was the director of his alma mater's new Laboratory of Clinical Microscopy. He also had served as bacteriologist for the Oakland Health Board. Montgomery came from New York with a medical degree from the College of Physicians and Surgeons.

He specialized in dermatology but also taught at the Medical Department, where he held a chair in pathology and microscopy. Although initially skeptical, both experts leaned toward Kellogg's interpretation.[9]

The morning after Wong Chut King's death, Kellogg brought his slides and tissue samples to the federal quarantine station's laboratory, where Joseph Kinyoun confirmed the tentative diagnosis and, for final proof, injected infectious material into two guinea pigs, one white rat, and a small monkey.[10] After forty-eight hours, however, the animals still appeared to be in good condition, forcing the city bacteriologist to backtrack, confessing to reporters that he was no longer absolutely certain of his diagnosis. Their suspicions confirmed, members of the press intensified their campaign against the health board, quoting another foreign expert who wondered why no further Globe Hotel renters, including those sharing quarters with Wong, were sick. Given the disease's characteristics, there were "enough germs to depopulate Chinatown."[11]

Lacking proper bacteriological confirmation and facing growing public skepticism, the health board unanimously voted to lift the "preventive" quarantine a day later. With criticism coming from all sides, especially business interests and the press, the situation had become untenable. Printing headlines like "bubonic bluff,"[12] newspapers called for the resignation of health board members, citing incompetence and deceit. The temporary encirclement of Chinatown turned into a setback for sanitarians. With regular scavenger service suspended, mountains of rotten food littered the streets, creating an unbearable stench while providing further food sources for hungry rats.

In a pattern that would be replicated in the months ahead, laboratory findings and quarantine threats would be announced, manipulated, and denied in a climate of profound political and economic division. The Chinese community, characterized by the *San Francisco Call* as containing "enough angry Celestials to fill an asylum,"[13] typically reacted collectively by employing a strategy of passive resistance. The presumed emergence of plague was an embarrassment to residents. A traditional Chinese maxim counseled that shame should be covered up. Like families, the district as a whole wanted to avoid further humiliation and disharmony. To admit the presence of plague represented a serious "loss of face," prompting efforts to control and suppress all information that would suggest or confirm the perceived dishonor. Consul Ho Yow and the Six Companies remained defiant; they had threatened to file a legal injunction to stop the quarantine before it was lifted. Flooded with an avalanche of letters from concerned Chinatown merchants, Ho pleaded for a quick resumption of

trade between the United States and China. Residents were urged not to "swallow our grievances"; "if we do not protest and demand compensation, the Americans will only treat us even more cruelly."[14]

The monkey from Kinyoun's "menagerie" of inoculated animals died eighty-two hours after the original injection. An autopsy disclosed massive inflammatory changes and bacilli easily identified as plague. Health board members were invited to confirm the findings.[15] Although further solidifying Kellogg's plague diagnosis, the monkey's demise was anticlimactic. At a meeting, federal officials, the Chinese leadership, press representatives, and Mayor James Phelan considered a new quarantine. In view of the previous fiasco, San Francisco's sanitarians were content just to follow up with their search and disinfection campaign instead of supporting another controversial closure. The health board decided to organize a house-to-house search for additional plague cases in Chinatown in addition to cleaning and fumigating houses and sewers. A call went out for volunteer physicians willing to join the city's cadre of inspectors and plumbers.

After consultations, Ho reluctantly agreed to support the planned sanitary campaign as the lesser evil, offering the assistance of several hundred residents. He issued a proclamation to his countrymen explaining the need for the impending search: it would not only prevent plague but avoid another disruptive quarantine. The health board and the Six Companies negotiated strict guidelines designed to ensure a measure of respect and privacy for those chosen for screening. Aware of their keen sense of modesty and privacy, the consul demanded that the Chinese receive the sanitarians with open doors, kindness, and willingness to offer information.[16] Yet, expecting another quarantine, more residents chose avoidance, fleeing the city as rumors circulated that the district could be burned to the ground.[17]

The *Chinese Western Daily*, for its part, sought to minimize the findings by explaining to readers that rats were not suitable animals for confirming the diagnosis of plague. Since they were already quite susceptible because of their subterranean location, injecting them with contaminated fluids from Wong's corpse was not a fair and accurate test.[18] A week later, the suspicious death of another laborer, 22-year-old Chu Gam, created further tensions. The condition of Chu's body suggested that it had been deliberately concealed for several days, until the state of decomposition would confuse all bacteriological testing. All fingers pointed toward Edward Selzer, an elderly physician from Germany and graduate of the Eclectic California Medical College practicing medicine in Chinatown. To avoid inquiries from San Francisco health officials and prevent

a possible autopsy, Selzer allegedly allowed the body to decompose for nearly five days before preparing a death certificate citing pneumonia and cardiac insufficiency as the causes of death. Nevertheless, at autopsy, Kellogg insisted that a few plague bacilli could still be discerned from blood samples, and animal inoculations seemed to support his diagnosis.[19] The argument that the Chinese were showing bad faith gained further traction.[20]

Chu's death, together with that of several others, confirmed the health board's suspicions that a plague epidemic was in the offing and that Chinatown residents were deliberately concealing their dead, as well as hiding sick people or smuggling them out of the quarter. Statistics for March revealed that the mortality rate in the district had fallen dramatically.[21] What at first glance promised to be a harmonious relationship between local health officers and Chinese residents was turning increasingly confrontational, in spite of promises of collaboration from Chinatown's leaders. The health board responded by issuing a new directive that required Western and Chinese physicians attending Chinatown patients to promptly report all serious cases, whether acute or chronic. Visits to the Tung Wah Dispensary and consultations with Western staff doctors were included. Moreover, practitioners were expected to prepare detailed clinical histories of their patients; this provision would obviate the need for complete autopsies in cases of death.[22] Soon, the board went further, deciding to reject all future death certificates issued by Western physicians practicing in Chinatown because of persistent disparities in diagnoses. Only documentation prepared by the city physician or his assistants would be valid for obtaining burial permits, a measure that would seriously delay proper Chinese funeral arrangements.[23]

Health officials considered the proposed sanitary campaign in Chinatown necessary for the health of the city. To make matters more urgent, Hearst's *New York Journal* published a special Sunday "plague edition," the headline proclaiming, "The Black Plague Creeps into America." The account, laced with biblical quotations and dramatic medieval iconography from Swiss cemeteries, painted a picture of growing panic in San Francisco and other cities.[24] Hearst followed up his sensational story by personally sending telegrams to health officers of all major U.S. cities, asking them to take precautions against the spread of plague. San Francisco's dirty little secret was out.

Finally, three weeks after Wong's death, a small army of about 25 volunteer physicians—many from the Receiving Hospital—together with 50 policemen and 120 inspectors, officially began their inspection and general disinfection campaign in Chinatown, thanks to a special $7,500 appropriation from the

supervisors. To highlight the suspected municipal fleecing, one newspaper published a series of provocative cartoons depicting Kinyoun's inoculated animals picking the lock of the city treasury and fleeing with bundles of cash.[25] For the comings and goings of sanitary personnel, the authorities established two checkpoints equipped with fumigating stations, one located at Portsmouth Square. The action, intended to eliminate plague bacilli believed to exist in the soil, air, rooms, and possessions of sick Chinese residents, was to last nearly three weeks.

After inspectors dutifully planted yellow warning flags outside filthy-looking buildings, guards were stationed at points of departure from San Francisco, such as railroad terminals and passenger piers, on the lookout for people fleeing Chinatown, especially those trying to smuggle out sick relatives. Mounted police blocked outgoing roads as illegal immigrants, concerned of being scooped up in the dragnet, left the district. Every Chinese person appearing to be unhealthy could be apprehended and sent to the Tung Wah Dispensary for examination.[26] Such heavy-handed actions prompted the Chinese newspaper to question whether America was really a democratic country defending individual rights.[27] As the sanitary campaign gathered momentum, apprehension among Chinese merchants and laborers soared. Many expected worse—a repetition of the Honolulu tragedy with its accidental fire. Merchants quickly made inventories of their belongings for filing insurance claims in the event of loss. Consul Ho intervened once more, issuing another proclamation to stress the importance of sanitary measures and the need for Chinese compliance. He immediately mobilized a dozen interpreters to assist confused or anguished residents.

Ordinary Chinatown residents were convinced that the invading authorities harbored sinister motives and that the current harassment was payback for past frustrations stemming from gang wars and the aborted quarantine. Rumors circulated that the fumigations were designed to sicken dwellers and thus make them candidates for detention and examination. Some Chinese demanded that the consul protect them and wondered whether federal courts could stop such incursions.[28] In spite of sporadic incidents, the "invaders" encountered widespread resignation; instead of open confrontation, residents preferred to take evasive action and hide. Concerns grew that the sanitation efforts were affecting business and tourism in Chinatown. One newspaper estimated that thirty thousand tourists had been kept away from San Francisco in previous weeks because of the plague scare and cleaning.[29] At the same time, some voluntary inspectors were profiting from their visits "by lifting everything they could get their hands on."[30]

The health board was quick to use the sanitary campaign for extracting another emergency allocation from the supervisors designed to bolster their starving department. Rumors circulated that John M. Williamson, the "wicked and corrupt" board president, was prolonging the cleanup to keep his appointees employed (daily costs were estimated at $300).[31] To the dismay of local newspapers, board members also proposed a new budget of about $177,000 for the next fiscal year, including the purchase of a $50,000 central sterilizing and fumigating plant. The papers characterized such requests to pay for the "game of fake and bluff" as the most brazen ploy for obtaining funds in the city's history. Even the Chinese were surprised, concurring with the widespread suspicion that the "almighty dollar" was at the root of all the fuss surrounding cleaning operations.[32]

In response to the Hearst-inspired plague panic, Phelan sent an urgent telegram to mayors of fifty eastern cities, assuring them that Chinatown had been properly inspected and disinfected. No further plague cases could be found, and the danger was over.[33] Local officials blamed the sensational press for making San Francisco "the byword of the nation and moral plague-spot of the earth" and threatened publishers with a boycott of their advertisement sections.[34] San Francisco's leading mercantile associations discussed the implications of a plague-infected port, expressing concerns about trade with Alaska. Everybody agreed that radical action was warranted to prevent irreparable harm to the city's commercial interests, although partisan politics prevented any kind of consensus. Complaining about the sanitary expenses, Supervisor John Connor, a Democrat, suggested a cheaper alternative: removal of all Chinese from Chinatown to Hunters Point, at the southeastern edge of the city.[35]

Without new cases of plague, cleaning ended on April 7. In a retrospective analysis, the *Chinese Western Daily* reiterated the belief that local officials ultimately planned to expel the Chinese because of Chinatown's proximity to the financial district. People interpreted the yellow flags in front of buildings suspected of harboring potential plague victims as signposts for extorting money from scared residents. In China, bribery was a common tool employed by impoverished officials. In similar financial straits, San Francisco health officials demanded payoffs from supervisors and residents in the name of public health. This time around, deportation by way of quarantine and sanitation had failed because the board lacked enough power and funds.[36] Yet no one in Chinatown was naïve enough to believe that the health authorities would give up on their ultimate objective: permanent removal. Even if the Chinese decided to comply

with the authorities on antiplague measures, peace and tranquility would be temporary.

New Deaths: Searches, Vaccinations, and Fear of Detention

After more than a month without reported plague cases, a laborer from a small village near the Sacramento River died in a Chinatown alley on April 24. Law An had been in California for about thirty years. Tissue samples confirmed the presence of plague bacilli, spawning new fears that the disease was spreading.[37] The first female victim followed; Lim Fa Muey worked in a cigar factory, where she suddenly collapsed and died. In this instance, Kellogg was able to locate typical buboes in the groin, covered up with a sticky black plaster applied by a Chinese practitioner. Working for a "respectable" Chinese family, another teenager, Chin Moon, ended up at the Pacific Hospital, referred by Minnie Worley, a physician at the Tung Wah Dispensary. Worley diagnosed Chin as suffering from typhoid fever, but resident physicians who examined her on arrival believed she had appendicitis. The patient died the next day, with Worley insisting that the correct diagnosis was typhoid fever. Both Frank Wilson, the assistant city health officer, and bacteriologist Wilfred Kellogg proceeded to take samples from a walnut-sized growth located at the groin. Slides, cultures, and inoculations at Kinyoun's Angel Island laboratory pointed toward bubonic plague.[38] Chin's case demonstrated the problems facing Western-trained clinicians unfamiliar with the disease. Plague was very difficult to recognize from clinical evidence alone; cases remained hidden under diagnostic labels such as pneumonia, acute nephritis, and venereal disease, compounding the problem of deliberate Chinese obfuscation or lack of reporting. Finding and recognizing the plague bacillus demanded the intervention of expertly trained bacteriologists, who were still in short supply.[39]

Increasingly concerned, Kinyoun predicted that the plague would become truly epidemic in the Chinese quarter, suggesting to Surgeon General Wyman on May 15 that the entire population in the district be inoculated with the Haffkine prophylactic vaccine, a serum offering at least six months of immunity to residents.[40] Wyman immediately arranged for the shipment of twenty thousand doses to San Francisco. In a telegram, however, he warned Kinyoun that health officials should employ "tact and discretion" in enforcing the vaccination: "do not be harsh or quick," he commanded, and avoid targeting only Asians by vaccinating a few locals.[41] Wyman also insisted that both the Chinese consul

and minister be contacted and persuaded to use their influence so that "the Chinese comply cheerfully with necessary measures."[42] Ho and his attorney, John E. Bennett, agreed to the planned vaccination, characterizing it as the "most reasonable solution."[43] The next day, May 16, Mayor Phelan, San Francisco Health Board members, Merchants Association leaders, and representatives from the Chinese Six Companies met to discuss the implementation of the vaccination plan. Invited to a conference with Consul Ho, fifty to sixty leaders from the Chinese Six Companies all agreed to recommend vaccination to the membership of their benevolent associations and tongs.[44]

Rumors of the planned immunization program, however, soon began circulating through Chinatown, plunging the quarter into chaos. For the Chinese, planting a serious disease in a healthy individual was similar to opening one's door and welcoming thieves. Others argued that if the vaccine were really effective, it should be administered to rats. Once these animals were protected, humans would be safe; there was no need to expose people to additional risks.[45] Many residents suspected that the new intrusion of health department personnel would bring about another quarantine, ending with a burning of the entire district. A large crowd assembled in front of the Six Companies' headquarters to protest and demand a boycott of the procedure.[46] In spite of Chinese opposition, the health board insisted that the plan be carried out. Those who refused the vaccine would not be allowed to leave the city.

Faced with near mutiny, both Consul Ho and Six Companies representatives tried to calm the crowd, suggesting that the Chinese refrain from arguing with local health officials sent to administer the inoculations. Bennett, Ho's attorney, tried to reassure residents that the inoculations were indeed harmless. Vaccination was more desirable than other contemplated measures, such as expelling inhabitants and burning Chinatown. Leaders stressed that the procedure was not specifically aimed at the Chinese but was a scientifically approved preventive measure routinely enforced whenever plague threatened.[47] Unvaccinated gas and water inspectors, post office employees, census marshals, and other San Francisco residents circulating freely through the Chinese district contradicted this statement.[48] For their part, vaccinators with their interpreters attempted to explain the procedure, including the expected side effects. Minnie Worley began distributing pamphlets written in Chinese with information about the Haffkine vaccine and its administration. She insisted that the serum was an effective plague preventative but warned of complications, including fever, dizziness, or vomiting.[49] Educated Chinese worried that the vaccine was still considered "ex-

perimental." Anxiety intensified following the publication of a reporter's personal experience with the Haffkine vaccine. Writing for the *San Francisco Examiner,* J. A. Boyle vividly described shooting pains from the site of his injection near the shoulder that spread to his neck and head, causing numbness and partial arm paralysis. Boyle admitted to being flushed and feverish and "drifting into stupor" before this "decidedly unpleasant" experience gradually abated.[50]

Facing growing resistance, local and federal health officials announced that the procedure would be strictly voluntary. Led by city health officer Aloysius O'Brien, a corps of physicians began an inspection tour on May 19, offering free inoculations. But, fearing violence, every Chinese business and private house was closed in response to a general boycott. Around noon, the vaccinators entered the offices of the *Chinese Western Daily* and found the editor at his desk. Ng Poon Chew allowed himself to be inoculated in the belief that this would set an example for others.[51] As word spread of his deed, a mob assembled around his building on Sacramento Street, threatening to attack him. Beating a hasty retreat, Ng was forced to remain in seclusion at his Oakland residence for a few days. His newspaper lost more than half of its subscriptions from irate readers who condemned his gesture.[52] With Ng's reputation damaged, he failed to become a legitimate go-between for local health authorities and a majority of the district's population.

Since plague seemed to rise from the ground, Chinatown residents considered themselves adequately protected because they all wore shoes, in sharp distinction from their barefooted cousins in China. No one was currently afflicted with plague, and its behavior since early March had violated medical expectations and popular notions associated with the disease. Others simply believed that the serum was venomous, programmed to kill them. In fact, the vaccination campaign was playing out during a period of stiff resistance among Americans who opposed smallpox vaccinations for their schoolchildren. Such antivaccination sentiments, widely disseminated among large sections of the San Francisco population, may have played a role in shaping Chinese views, which already held most Western medical practices in suspicion.

Even the "Haffkinized" Ng Poon Chew changed his mind as reports trickled into his office that several Chinese who had submitted to the vaccination had become sick and unable to work. A circular posted throughout the district now recommended noncompliance. Ng went so far as to pronounce vaccination a medical torture as well as an excuse for city sanitarians to obtain more funding.[53] Similarly, lawyers for the Six Companies changed their stance, demanding an

end to the entire program. In this quest they were supported by local Protestant churches doing missionary work in Chinatown. Their official statement expressed solidarity with the plight of the Chinese, given the injustices being inflicted on them by the authorities.[54]

Another plausible reason for Chinese anxiety over poisoning centered on the modest anti-rat measures instituted by the San Francisco health authorities on May 11, fully a week before the vaccination campaign started. Prodded by federal health officials,[55] the San Francisco Board of Public Works at last placed poisoned fish bait into Chinatown's sewers. Several hundred carcasses, their bellies filled with white arsenical paste and phosphorized oil, were nailed onto trays, placed crosswise at different points above the sewage flow. Distrustful residents interpreted this action as sinister, designed to kill people rather than rats.

As the unrest persisted, several tongs promised to harm the Chinese leadership and anyone else submitting to vaccination. Shops continued to stay closed, their owners terrified that an angry mob would wreck them. In a proclamation, Ho strongly urged the masses to be patient and wait for the results of diplomatic negotiations. Terrified, ordinary Chinese people expressed a willingness to be deported back to China rather than submitting to Haffkine vaccination. In view of the persistent and violent resistance, both Consul Ho and leaders from the Six Companies finally gave up on their efforts and sent a cable to the Chinese minister in Washington asking for federal protection.[56] Within a week, the vaccine drive was abandoned with only 53 Chinese residents, 530 Japanese, and 234 other San Franciscans having received shots.[57] Wyman appeared surprised about the ill effects of the Haffkine prophylactic since similar doses employed in Honolulu were innocuous. Popular in India, the value of this temporary measure remained in doubt.[58]

Failure to vaccinate Chinatown's population placed the city in a difficult position. Leaders from the San Francisco Merchants Association and Trade Board forcefully expressed their concern about a growing national perception, created primarily by the print media, that the city was harboring a deadly disease with potential for creating a national disaster. A thirty-member Citizens Relief Committee proposed to work with both the San Francisco Health Board and the Marine Hospital Service to establish an effective and complete quarantine of Chinatown, coupled with a thorough cleaning and incineration of all potentially infective matter. For this purpose, the committee immediately pledged $30,000 to be raised through subscriptions. The goal was to send a message to the rest of

the nation and the entire world that San Francisco was willing and able to deal with its current sanitary problem.[59] For its part, the California State Health Board sent a notice to all health officials in other states indicating that reports concerning the presence of plague in the city were "grossly exaggerated." The message emphasized that so far all presumed cases of this disease were Chinese residents, found dead in their own unsanitary neighborhood. With no further plague deaths in California, all commercial embargoes already placed against the state should be lifted.[60]

In less than three months, the San Francisco Health Board had experienced a series of humiliating defeats: a hasty quarantine, an inspection and cleaning operation that failed to find new plague cases, and a vaccination fiasco. With financial support from local merchants, the health board decided to get serious and rent several grain warehouses at Mission Rock, a small island near the city's port, to be converted into a temporary detention facility for those suspected of suffering from plague. It was time to employ the full spectrum of preventive sanitary measures for a recalcitrant population of ignorant "coolies" who refused to follow the advice of their more enlightened leaders.[61]

The reaction was swift. In a proclamation to his people, Consul Ho Yow warned that Chinatown residents would "never submit" to such detention. Together with the Six Companies and their attorneys, Ho promised to explore all legal remedies. Any determination as to the cause of sickness should remain in the hands of the Chinese themselves: "They would prefer to risk their lives rather than being compelled to remain in the power of American physicians for an indefinite period of time." As a compromise, the Chinese leadership suggested that hired Western physicians—Chinese practitioners lacked legal standing—would be allowed to take blood samples from sick residents for diagnostic purposes and manage their illnesses.[62]

On May 24, lawyers filed a bill of complaint in U.S. Circuit Court of Northern California on behalf of Wong Wai, a Chinese merchant, against all members of the San Francisco Health Board and Joseph Kinyoun. Once again, the American justice system became the preferred arena for presenting grievances. The plaintiff asked for an injunction restraining these health officials from imposing unlawful restrictions on the rights of the complainant. Reasons given for the legal action were the health board's refusal to allow Chinese people to leave the city and attempt to administer an experimental vaccine, both plague-preventative actions selectively applied to Chinatown residents. A powerful array of prominent local law firms such as Reddy, Campbell and Metson, Maguire, and Gallagher,

together with Samuel M. Shortridge and John E. Bennett, were asked to handle the case in federal court under retainer from the Six Companies. The suit alleged that the actions of the local and federal health authorities were "purely arbitrary, unreasonable, unwarranted, and wrongful" and constituted an "oppressive interference with personal liberty."[63]

A large crowd attended the proceedings before Judge William Morrow, including prominent members of the Chinese and Japanese communities.[64] The spokesman for the Chinese was James G. Maguire, a former judge and congressman who ran against Henry Gage on the Democratic ticket for governor.[65] After both sides presented arguments, the judge granted an injunction on May 28, agreeing that both the travel ban and the vaccination campaign were clear violations of the due process and equal protection clauses of the Fourteenth Amendment. Morrow argued that there was no rational and compelling reason for the restrictions on liberty of travel and personal autonomy and property. Moreover, restricting vaccination to Chinatown residents as a condition for travel was discriminatory, especially as plague had not been officially acknowledged to exist in San Francisco. Most importantly, Judge Morrow indicated that all public health measures, while lawful, were not totally immune to judicial scrutiny, and inasmuch as they impaired personal liberties, totally arbitrary measures could not be permitted to stand. In this particular case, the regulations were "boldly directed against the Asiatic or Mongolian race as a class, without regard to the previous condition, habits, exposure to disease, or residence of the individual."[66]

Forced to comply with the legal ruling, the San Francisco health authorities lifted all restrictions on the movement of people in and out of Chinatown. "We, the yellow race, are innocent," the *Chinese Western Daily* declared, asking "how can the U.S. Constitution turn a blind eye on such a truly dirty trick like vaccination instead of discouraging it." Meanwhile, Chinatown celebrated, with much clapping of hands and striking of pans. Stores reopened, but many noted that the victory came at a price: a handsome amount of money paid to the army of high-powered Western lawyers. Yet it was worth the effort—a second round of confrontations with the local and federal sanitarians had ended in victory.[67] Kinyoun considered it "the most serious blow the Service has received since assuming control of quarantine measures."[68]

"Wolf Doctors" Hunt for Plague

Despite Consul Ho's efforts urging the Chinese to cooperate with local "white devils" in their search for potential plague cases, the repeated encounters between sanitarians and Chinatown residents were traumatic. Both sides had reasons to be worried. Plague was still imperfectly understood, and the possibility of contagion from contaminated air and soil demanded precautions. After submitting to Haffkine inoculations, health department inspectors, even recent medical graduates familiar with bacteriological principles, feared for their lives because of the purported lethality of plague bacilli. Like their medieval ancestors, they sought to protect themselves from contagion by wearing little pouches filled with camphor and other unpleasant-smelling resins like asafetida, to some a gesture "bordering on the ridiculous."[69] Placed around the neck, these aromatic bags were believed to repel miasmatic vapors responsible for plague.

Most sanitarians still focused on contaminated air, food, drink, household goods, and filth, considering plague to be primarily a human disease, with rodents only secondarily involved. Expert local bacteriologists such as Ryfkogel and Montgomery were aware of speculations that the transmission of plague might occur through rats and possibly their fleas. Speaking at the San Francisco Medical Society a month earlier, Ryfkogel pointed out that plague victims in India and Hong Kong displayed insect bites and secondary abrasions on their feet and legs, suggesting a different pathway of infection.[70] Yet, Anglo-American experts distrusted the findings of French scientist Paul-Louis Simond, like Yersin a member of the Pasteur Institute, who claimed to have experimentally proven that rat fleas were the true vectors of plague in 1898.[71] Among leading American detractors was George Nutall, a native San Franciscan bacteriologist and 1884 graduate from the University of California Medical Department, now working at Cambridge University.[72]

Thus, a veritable cat and mouse game began. Bumbling health department inspectors with club-wielding police escorts made their way through Chinatown's narrow streets, confronting residents. According to witnesses, the officials swept from house to house, pounding on closed doors and demanding admission. These incursions increasingly took place during evenings, when officials believed most family members would be present. Zealous about their privacy, Chinatown residents strongly resented intrusions from strangers. Trespassing felt like a desecration. If refused entry, the men broke down the doors with their axes and sledgehammers. To little avail, terrified occupants demanded valid forms of

identification from the invaders. All too often, searchers were abusive during their assault on domestic privacy; beatings, injuries, and plenty of humiliation followed.[73] Panic-stricken women expected possible molestations and even rape. Home invasions inevitably caused significant property damage, as inspectors using candles and lanterns for illumination moved furniture, checked out dark spaces under bunks, and groped along basement corridors and tunnels. Terrorized residents witnessed the wholesale ravage of their homes. Inspectors forced them to surrender household goods considered potentially contaminated; some items were thrown into the streets for disposal and burning, others were simply stolen.[74] A noted journalist and author, Miriam Michelson, captured the stories of four anguished Chinese women affected by these events. Chow La, wife of a photographer who had worked as an English translator, expecting a knock on her door, suffered from anxiety attacks and nightmares; her neighbor Ah King hid her baby all day, nursing it only at night, in the belief that Western physicians would come and poison it. Another, Li Que, cried all the time, terrified of being sent away with other residents to a small rock in the middle of the sea. Finally, Ah Fong, afraid to eat and sleep, spent day and night listening for the sounds of soldiers she believed would come to kill her.[75]

Tracking disease depended on intelligence, nearly unobtainable in a district deliberately isolated from mainstream San Francisco society. Critical medical information from patients, their relatives and friends, and ultimately the societies and brotherhoods, also remained unavailable. In spite of the use of translators and threats of arrest, inquiries were usually fruitless because everyone pretended not to understand the questions. Little cooperation was the rule; the stereotypical response was "no sabe, no sabe" (don't know), a Spanish reply adopted from neighboring Mexican migrants and designed to avoid further trouble by indicating total ignorance.[76] Without solid epidemiological data, essential for locating the seats of disease and targeting sanitary measures, health board members admitted working largely in the dark. Paradoxically, frustration and guesswork forced even more aggressive interventions with the help of police officers, further alienating Chinatown's residents. A sense of violation and dishonor began to permeate the entire district. One newspaper printed a story about a merchant who not only lost small valuables but also was detained and subjected to an elaborate bodily inspection on suspicion of being infected.[77] Part of the medical examination consisted of checking the groin area and armpits for possible buboes, a source of great personal embarrassment.

Disinfection procedures were equally destructive. Chief Sanitary Inspector George F. Chalmers, a district surgeon for the Southern Pacific Railroad, divided Chinatown into several sections to conduct aggressive cleaning operations. Convinced that a shotgun approach was advisable and plague was primarily spread by filth and garbage, his men went after refuse and dirt. Heaps of "germ-carrying" rubbish were collected in boxes and barrels, then promptly carted away for incineration. Sewer gangs flushed all pipes with water, and streets were sprinkled with crude petroleum to settle dust. Chemicals were always spread in excess because microorganisms were invisible. Wagons with barrels of sulfur arrived at previously flagged buildings. With the help of portable burning pots, workers directed the acrid smoke toward the exterior structures, roofs, and gutters before moving inside and fumigating hallways and cellars. Interior walls were hosed with a lye or dichloride-of-mercury solution. Soon, a yellow plume with an intolerable smell shrouded the district, blinding and suffocating bystanders while permanently staining their garments.[78] Of limited disinfecting value, sulfur dioxide caused respiratory symptoms, particularly asthma; it also bleached all dyes on textiles, affecting upholstery and silk drapes, staining furniture, and

Crew with horse-drawn wagon for pumping disinfectants onto houses.
National Library of Medicine, Images from the History of Medicine, A15973.

attacking metals. Aware that plague was a rat disease, many Chinese wondered why this chemical smoking process targeted and sickened humans but failed to reach the animals' subterranean lairs.

Ng Ah Sing, a Chinese curio-shop owner, penned two letters to the editor, in broken English, complaining about the destructive effects of sulfur applied to his Dupont Street establishment. Claiming to have learned some English and Christian dogma in a neighborhood mission school, Ng insisted that even though he and his wife were "clean," Americanized people, the health board had targeted them. What permission did the inspectors, policemen, and workers have to barge into his shop and spray this suffocating stuff on him, his merchandise, and his customers? Did the Chinese have no rights? The aftermath was even dourer: his clothes were ruined, his lungs inflamed, his wares damaged. Deprived of his favorite non-Chinese clientele, Ng worried about paying his rent and staying in business. It made little sense to sicken all Chinese people in the name of sanitation. Health board physicians were frauds. They were not following Christian principles; instead, they caused great harm. Whether authentic or fictional, this newspaper story conformed to other accounts about the infringements on personal freedom and the hazards of applying disinfectants.[79]

Soon, the *Chinese Western Daily*'s tone became highly critical of the behavior of San Francisco health officials. Its writers demonized health board members as beastly "wolves and tigers."[80] Operating in packs, these "wolf doctors" were cruel and relentless predators, scheming to vilify the Chinese by accusing them of harboring plague. Fed with fresh meat provided by conspiring supervisors and merchants, they bared their claws and teeth, "biting and eating people anytime." Never fully satiated, such rapacious beasts could become desperate and cause even more harm. One story characterized O'Brien as "ruthless and venomous," adding that the Chinese "would be glad to bathe in his blood."[81]

Hunting for "bumpkin"—the code word for human plague—Marine Hospital Service officers employed in telegram exchanges—became a relentless pursuit in an ever more hostile environment. By now, terrified residents staunchly refused to admit any strangers into their homes.[82] For the Chinese, conflict resolution traditionally occurred through reducing hostility and finding compromise, but this cultural stance was mistaken for passivity and lack of will. Relatives of ill Chinatown residents were told to inform the Six Companies, no matter how trivial the illness. To confuse and neutralize the local "wolves," the Six Companies decided to follow Governor Gage's suggestions and hire pro-Chinese Western

physicians to attend sick residents already reported to the Chinese leadership. With the help of interpreters, the arrangement allowed for a measure of Chinese oversight, and the practitioners were told to familiarize themselves with the illnesses well before the arrival of local health officials bent on fabricating additional plague cases. In the event of a death, these doctors were urged to formulate a plausible diagnosis for a death certificate before the arrival of "wolf doctors."[83]

From the start, local and federal health officials openly criticized Western physicians operating in Chinatown, including those staffing the Tung Wah Dispensary.[84] As events unfolded, these men and women were repeatedly accused of failing to notify local authorities about presumed plague cases, issuing false death certificates, and, in a few instances, deliberately destroying evidence that could have led to a proper plague diagnosis.[85] William G. Hay, a dermatology professor at the University of California Medical Department, participated in the first inspection of the district as a volunteer, then returned as a vaccinating officer. During a meeting at the California Academy of Medicine in May 1900, Hay accused the Chinese and their sympathetic Western doctors of switching death certificates.[86] In vivid detail, Hay described the inspection of a house on Waverly Place where five Chinese were seated at a table, apparently playing a game. In spite of a thorough search, nothing unusual was found. Two hours later, however, neighbors reported a death in the same place: it was one of the men, whom the "wily heathen" had simply propped up and braced against the table with his hand placed over the dominoes.[87] Fueled by frustration, efforts to discover plague cases in Chinatown mounted. In early June, another new local health regulation demanded that the names and addresses of all sick Chinese be immediately reported to the health board before any physician—Western- or Chinese-trained—would be allowed to see and treat them. To avoid further diagnostic "fabrications," San Francisco officials acquired exclusive rights to examine all deaths six hours before any other practitioners or undertakers would be allowed access to the bodies.[88] While the move was aimed at eliminating all interference from Western physicians in the employ of Consul Ho Yow and the Six Companies, residents worried about the creation of more restless ghosts.

When Dang Hong, a middle-aged Chinese laborer, died at the Guan Fu coffin shop on May 29, few people predicted that his passing would ignite another fierce battle between health board "wolves" and the Chinese leadership.[89] In the latter's version of events, Dang not only suffered from syphilis but also had a scrofulous (tubercular) swelling in the neck, confirmed by a Western physician.

Medicines prescribed by two Chinese practitioners failed to help the patient, and the sores only grew larger over the next two months. Near death, Dang asked to be moved to the undertaker's "hall of tranquility" to await the end. Dr. George Fitch, the expert in syphilis, seemingly confirmed the diagnosis. Anticipating his imminent death, Dang made final arrangements: his embalmed body should be shipped back to Canton for burial.[90]

Notified of the death, Kellogg and Wilson immediately went to examine the body, discovering a large swelling under the left side of his jaw and a slightly enlarged lymph node in the femoral region. The corpse also displayed several boils around the neck. An incision of the suspected buboes disclosed hemorrhages and necrotic tissue, as well as pus. Smears apparently showed plague bacilli. A complete autopsy scheduled for the next morning at the undertaker's premises brought together physicians including Kinyoun, Wilson, Montgomery, and George A. Cable, engaged by the Six Companies. The dissection drew a crowd of Chinese to the establishment.[91] Witnesses observed generalized signs of inflammation with a profusion of fluids in most organs, but the lungs were clear. Kellogg, who was in charge, noted the presence of "blood-stained serum" in Dang's body. He told a reporter for the *Chinese Western Daily* that these changes suggested the presence of plague. Confronted with another potentially damaging plague diagnosis, Consul Ho ordered an investigation. To Kellogg's embarrassment, the "blood-stained serum" in Dang's body turned out to be embalming fluid previously injected by the undertaker in preparation for shipment to China.[92] The Chinese vehemently insisted that Dang had died of scrofula, a tubercular condition common among Chinese migrants. Health board member Baum refused to share tissue samples but, prodded by the lawyers, allowed Cable, a physician from Ohio who practiced in Chinatown, to receive a sample. Ernest S. Pillsbury, a prominent local pathologist and bacteriologist who owned his own laboratory, examined the material and confirmed the Chinese clinical diagnosis: syphilis.[93] Kellogg and Kinyoun's own investigations revealed the presence of plague bacilli, a finding that promised to trigger another Chinatown blockade.[94]

Because so much was at stake for the Chinese, attorney Bennett, arguing for the Six Companies, demanded that a trio of doctors under contract by the Chinese be allowed to carry out an independent examination of Dang's body, still resting in the coffin shop by order of the deceased's friends. Henry D'Arcy Power, a licentiate of the Royal College of Physicians of Ireland, practiced general medicine. A Virginian, David A. Hodghead specialized in obstetrics and

pediatrics. The third was Ernest Pillsbury. All three held faculty appointments at the San Francisco College of Physicians and Surgeons. However, city health officer O'Brien denied the Chinese demand, claiming that the corpse had already been infused with chemicals before embalming. Reopening the casket, he affirmed, would create a further risk of contagion. After another request from the Six Companies, Pillsbury was allowed to enter Chinatown to examine Dang if he submitted to Haffkine vaccination. While the bacteriologist waited at the inoculation tent for almost an entire day for his shot, health board members frantically phoned the Chinese undertaker, ordering Dang's immediate burial, therefore precluding further challenges to their plague diagnosis.[95]

Informed of the health board's behavior, Supervisor William N. McCarthy demanded the removal of all its members for professional incompetence and political maneuvering. Called to justify his request, the supervisor detailed an extensive list of omissions, from lack of proper isolation procedures to a diversion of disinfectants bound for Chinatown to private uses. At the heart of McCarthy's argument, however, was the accusation that Phelan's health board members were unfamiliar with bubonic plague.[96] In the midst of this municipal brawl, Pillsbury got his revenge. After performing studies and inoculations from a subsequent suspicious plague victim, he pronounced it a case of chicken cholera.[97] His colleague, Silas Mouser, a veteran microbiologist affiliated with the state board and also owner of a private laboratory, also denied the presence of plague bacilli, and the two published an article about their findings in a local medical journal.[98] An editorial in the *Chinese Western Daily* explained that at this point, health board members seemed trapped and committed to making false plague diagnoses for fear of forfeiting all credibility. Losing face was not an option.[99]

Turmoil: Another Quarantine and a Federal Lawsuit

Within hours of Judge Morrow's May 28 ruling, the San Francisco and California health boards, together with a group of local businessmen, had held an urgent meeting. Several states were on the verge of establishing embargoes against California merchandise because of the perceived danger that plague could be transmitted to other parts of the country. The consensus was that the best way to avoid such an embargo was to, once more, officially quarantine Chinatown, sending a clear signal to the nation that the situation created by the plague scare was under control. A prime mover behind such a move was the Southern Pacific

Railway, always concerned about negative impacts on its passenger and cargo service. The California Act of 1893 provided for a $50,000 emergency fund to prevent the introduction of cholera or other diseases to the state. With the approval of the governor, and under his direction, this money could pay for the planned quarantine.

Confronting a virtual ultimatum from state board members to either act or face a complete quarantine of San Francisco, the Board of Supervisors passed a resolution on May 29 authorizing the health board to proceed immediately and close down Chinatown. Phelan again told the media that the planned action was "merely precautionary."[100] This time all streetcar traffic through the district was halted. The plan called for a systematic inspection and removal of all suspicious sick persons to an outside detention center for further observation. Confirmed plague cases would be immediately brought to a lazaretto and placed in strict isolation. At the same time, efforts would be directed toward a wholesale destruction of rats, as rodents were increasingly suspected as vehicles for dissemination of the contagion.[101]

To prevent this action, attorneys for the Six Companies demanded that measures be taken to protect Chinatown residents. Instead of closing down the entire district, only buildings where plague deaths occurred should be quarantined. The lawyers threatened further litigation and requests for injunctions, charges of contempt of court, and habeas corpus petitions.[102] The health board, however, ignored such warnings and decided to proceed with its plans. President Williamson once more indicated that the board operated with a "meager pecuniary allowance." Their new ally, the Citizens Relief Committee, previously organized by the city's prominent businessmen, upped its financial pledge with a $50,000 subscription from merchants, bankers, property owners, and others.[103] According to the Chinese, the money would feed the hungry health board "tigers" to keep them temporarily satiated.[104] Directives went out to establish a garbage crematorium at the edge of the quarantined district. A steam sterilizer, placed under a tent at the Portsmouth Square checkpoint, would disinfect all outgoing sanitary and public works personnel.

By the next day, workmen and a large police force appeared in Chinatown. Residents expected another possible razing or burning of their homes.[105] Instead of employing ropes, the authorities this time erected a fence around the district, using wooden planks, posts, cement blocks, and barbed wire to seal off the area completely, including to food supplies. However, buildings occupied by San Francisco residents or businessmen at the edge of the quarantined

district were conveniently left out of the sanitary cordon. The *Chinese Western Daily* described Chinatown residents as "like fish caught in a net," while Bay Area Chinese were "birds with a broken nest."[106] The issue of detention centers for suspected plague victims raised its ugly head once more, with the federal government's Angel Island and California Dock Company's Mission Rock as potential locations.[107] After the secretary of war consented to the use of Angel Island for housing up to 7,000 Chinese people, with Mission Rock ready to absorb another 1,500, Kinyoun volunteered to assume direction of these camps, demanding a $40,000 subscription to feed the inmates.[108] Faced with quarantine and detention, Chinese leaders immediately summoned their legal teams to prepare another request for an injunction that would stop these actions. Consul Ho notified his brother-in-law, the Chinese minister in Washington. Wu Tingfang, in turn, lodged a complaint with Secretary of State John Hay, arguing that this measure constituted a violation of the Burlingame Treaty between China and the United States.[109] In the meantime, Mayor Phelan added to the turmoil by refusing to take responsibility for feeding the blockaded population.[110]

While newspaper headlines predicted an imminent exile of five thousand "bacilli-bearing coolies" to the "Rock,"[111] on June 5 the Chinese leadership filed another judicial request in the District Court to stop the planned deportation. This time, the plaintiff was a Chinese grocer, Ho Jew (officially Jew Ho), who complained that the quarantine measures interfered with his personal liberty and right to carry out his business: his shop and residence were located at 926 Stockton Street. The defendants were again the San Francisco Health Board and Kinyoun.[112] Among the salient points of Ho's request was the fact that the quarantine was discriminatory because every non-Chinese address along Stockton Street was excluded. The makeshift fence prevented the supply of food and other necessary articles, impacting Ho Jew's livelihood.

A day later, Morrow, once again the presiding judge, issued a partial restraining order against the San Francisco Health Board, lifting the embargo on food supplies to Chinatown and delaying the removal of Chinese to the Mission Rock detention camp. The court order also allowed people to freely move in and out of the district provided they abided by established sanitary laws.[113] Visitors had to submit to Haffkine vaccination before being allowed to enter the district, but implementation remained spotty and discriminatory. Seeking to fix up premises to avoid more destructive inspections, the city's busy master plumbers and worried building owners circulated unchecked.[114]

At the request of counsel for the health board, Morrow also granted the defendants a continuance, which further infuriated Chinatown's residents. A large crowd assembled outside the headquarters of the Six Companies, threatening once more to riot and storm the building. Many had already lost their jobs and were without food and other supplies.[115] Because of growing shortages, prices for the remaining merchandise were skyrocketing. Thousands would soon be destitute. Consul Ho warned that the special Chinatown police squad would be insufficient to quell a serious disturbance. San Francisco's mercantile leadership attempted to mediate, offering to meet with attorneys for the Six Companies and hammer out a compromise. If the Chinese dropped their lawsuit, the health board would lift the general quarantine and only isolate potentially infected buildings. The Chinese rejected the offer; they insisted on the unconditional withdrawal of sanitary personnel from the district.

But "trouble was brewing."[116] In a bizarre incident, an undertaker bringing three coffins across quarantine lines was mobbed, his shipment turned around, the shop battered with stones and clubs, forcing Wing Tie, the owner, into hiding. The crowd was apparently incensed, terrified that health officials would interpret the cargo as a sign that unreported sick people were dying in Chinatown, emboldening sanitarians to redouble their efforts to find them.[117] Two days later, tempers flared again, triggered by the threatened vaccination of a Chinese resident at Portsmouth Square. That night, a mob of about a thousand men gathered once more in front of the Six Companies headquarters, demanding action from their leaders.[118]

As pressures mounted, Consul Ho acknowledged that a week earlier, one of the leading Chinatown merchants had come to the Chinese Merchants Exchange bearing an offer from an unnamed local official soliciting a bribe of $10,000 for raising the quarantine and releasing a large shipment of merchandise from China currently detained for fumigation. The alluring prospect quickly generated $7,000 in Chinese pledges, but the intermediary then abruptly withdrew the deal.[119] Ho's revelation of the extortion effort, meant to demonstrate to residents the leadership's eagerness to avoid further turmoil and misery, caused a sensation outside Chinatown. Rumors swirled concerning the official's identity, with some finger-pointing directed toward Pillsbury, the bacteriologist, who was said to have already pressured a federal army official to confirm a no-plague diagnosis of specimens in his laboratory in exchange for money.[120] If the episode was meant to expose local health officials as more interested in personal gain than sanitary principles, the health board turned the argument around. Pre-

tending to be above reproach in the face of dishonorable Chinese behavior, the officials called for a grand jury investigation.[121]

By June 12, the San Francisco Health Board filed a lengthy and detailed response in court to Ho Jew's bill of complaint, essentially asserting that the quarantine was the most reasonable approach to dealing with an incipient plague epidemic, preventing "promiscuous communications" between those in Chinatown and all other San Francisco residents. Oral arguments began the following day, with Campbell, lead attorney for the plaintiff, inviting Judge Morrow to tour the borders of Chinatown and observe for himself the gerrymandering of quarantine lines. He also presented a series of affidavits from licensed San Francisco practitioners who emphatically rejected the plague diagnoses. Campbell also tried to argue that by confining thousands of residents, the quarantine had, in effect, created a potential "plague quarter" capable of spreading disease to the rest of the city. Sanitary experience recommended the specific isolation of infected rooms or houses. He also used the opportunity to cast some doubts on the germ theory of disease by mentioning the controversies surrounding Kitasato's discovery of the plague bacillus. Campbell argued that none of the health board members had ever seen a living person afflicted with plague. If there was such a great risk of human contagion, why were "these boys" (health officials) playing around with their lethal plague germs without anybody else becoming infected? Perhaps God was performing miracles in San Francisco, concluded Campbell.[122] Impressed, the court declined to accept evidence concerning the plague cases diagnosed by the health board.[123]

Although a veritable parade of witnesses, including prominent merchants Levi Strauss, A. B. Spreckels, and former governor James Budd, testified at the trial, current governor Henry Gage turned out to be the star. He forcefully denied the presence of plague in the "healthful city of San Francisco," as no attending physician had ever diagnosed such a case. In Gage's opinion, all postmortem examinations performed on suspected cases for the past three months "failed to furnish satisfactory proof of plague." No increased mortality had occurred in Chinatown, and the presumed cases were unrelated. Moreover, the local health board obstructed "a full and fair investigation" by Western physicians hired by the Chinese.

Gage's testimony in favor of the beleaguered Chinese was not unexpected. During the initial lull in legal proceedings, the governor had met with prominent representatives from the Ministerial Union representing several Protestant denominations currently involved in a food drive for Chinatown's poor.[124]

Briefed by dispensary physicians Boudinot Atterbury and Lydia Wykoff about questionable plague diagnoses, the group decided to visit with all the major figures involved. They included Mayor Phelan, Governor Gage, health board president Williamson, and federal quarantine officer Kinyoun.[125] Their demand: a competent investigation into conditions prevailing in Chinatown together with a plea to halt detentions and removal of residents.[126] Dispensary staff members called on Gage at the Palace Hotel, and their presentation included recent pathology reports prepared by Drs. Cable and Pillsbury. Although the governor remained noncommittal, he seemed impressed by the information and promised to consider the issue more fully. As a partisan Republican, Gage refused to support the increasingly unpopular measures of Democrat Phelan's "bubonic board."

Gage had traveled from Sacramento to preside over a meeting with his state health board, with former governor Budd representing the Chinese Six Companies. While board members, especially Louis Bazet, agonized over whether to send out quarantine officers to patrol exits from California and thus prevent Chinese people from leaving the state because of the plague scare, the governor remained aloof. Thanks to favorable weather, California expected an abundant harvest and increased exports, with the fruit crop alone estimated at $25 million. If plague were confirmed in San Francisco, the state would face a widespread embargo of its products. Any move that could tacitly support the presence of plague had the potential to halt trade. In a tough spot, Gage was anxious to obtain more information.[127]

During the tense session, Gage upbraided his appointees for not performing their own bacteriological studies on presumed plague victims. How could he formulate an official reply to the federal government concerning conditions in San Francisco without firm evidence that plague was definitely in the city? Until that fact was conclusively proven, Gage vowed not to disburse a single dollar from California's emergency fund for current quarantine operations. His stance drew angry responses from board members Bazet and Andrew M. Henderson, who accused him of prejudice and lack of appreciation for the advances in medical science.

After Gage's departure, a regular session of the state board witnessed further clashes as D. D. Crowley and Henderson attempted to bypass the governor and send out a report about conditions in San Francisco based on the local board's acknowledgment of plague. California was a member of the National Association of Health Boards and morally and professionally bound to follow rules demanding that states share information about any appearance and progress of

contagious diseases in their territory. Budd, however, strongly objected, suggesting that it was the first duty of state health board members to report to the governor. He alone had the authority to communicate with the heads of other states and the federal government. Nevertheless, without regard to potential California trade embargoes, the board dispatched a letter directed to health officials around the country, pledging to keep them informed about further plague developments.[128]

Finally, on June 15, Judge Morrow handed down his decision in favor of the Chinese plaintiff. Like the previous ruling, the court employed the legal standards of due process and equal protection to grant the injunction against quarantine of Chinatown. Morrow ruled that the San Francisco Health Board acted "with an evil eye and unequal hand" in an arbitrary and racially discriminatory manner, actually increasing the risks of infection in the isolated population. As an aside, the judge exclusively cited the testimony of physicians who regularly attended the Chinese and had submitted affidavits denying the presence of plague, adding his personal opinion that "plague has not existed and does not exist in this city."[129]

Within hours of Morrow's decision, the San Francisco Health Board convened a special session. To comply with the legal ruling, the board officially lifted the quarantine around Chinatown but decided to continue its cleaning and fumigation campaign as authorized by the ruling. As workers began taking down the makeshift fences that had encircled the district for sixteen days, more than one thousand besieged Chinese residents poured across the breached border. Wagon after wagon of supplies entered Chinatown. After two weeks of fright, deprivation, and protests, euphoria descended on the beleaguered quarter. Celebrations marked the passing of the "fake" quarantine.[130] With Governor Gage on their side, the Chinese felt vindicated.

The Siege Continues

June–December 1900

> Officials, gentlemen, business people, laborers and merchants alike, are all people amidst trial and tribulation, stranded like caged birds, struggling for life like fish out of water. In all matters take care to preserve Chinatown; at all times protect and guard your neighbors.
>
> —ANONYMOUS POEM, *CHINESE WESTERN DAILY* (JUNE 7, 1900)

Federal Quarantine of California: A Political Blunder

Since an unvaccinated, and thus unprotected, Chinatown remained a potential plague-infested district in the heart of California, Surgeon General Walter Wyman brought the matter to the attention of President William McKinley. The result was presidential authorization to implement regulations contained in the Act of 1890 that imposed strict controls on the movement of people to prevent the interstate spread of disease.[1] Under such circumstances, the Marine Hospital Service would be authorized to refuse the sale of tickets for out-of-state transportation. People traveling from San Francisco to other parts of the country could not purchase them unless they were inoculated with the Haffkine serum or possessed a health certificate stating that the bearer was free from plague infection.[2] Faced with the spread of a disease that could potentially devastate America, federal quarantine officer Joseph Kinyoun was determined to act quickly and decisively. Citing the regulations, Kinyoun decided to enforce a travel ban without definite instructions from his superiors in Washington.[3] All persons unable to provide documentation about their current good

health status would be detained. He was quoted as insisting that "I am now enforcing the law of 1890; the city and county have no protection against the plague which we know has caused at least twelve deaths among Chinese residents."[4]

By mid-June, Kinyoun notified railroad and steamship companies about their obligation to demand health certificates before selling tickets. To enforce the law, federal officers were immediately stationed at key California borders. Trains arriving in cities like Trukee at the crossing into Nevada, Needles near Arizona, and Ashland in Oregon, would be stopped for passenger checks.[5] This travel ban was greeted with some diffidence in San Francisco's City Hall. Mayor James Phelan confirmed that Kinyoun had notified him personally, and he blamed the action on the recent federal court ruling that interfered with local efforts to contain plague. San Francisco Health Board President John Williamson and members William McCarthy and Vincent Buckley applauded Kinyoun's decision, comparing his efforts to similar measures taken earlier in southern states when local authorities appeared powerless in the wake of yellow fever epidemics. Facing reporters in the nation's capital, Wyman remained noncommittal, simply confirming that all federal regulations, including the May directive about Haffkine vaccination, applied to the current situation in San Francisco and had the support of the president and his Treasury secretary.[6]

Not surprisingly, Kinyoun's announcement drew the ire of California's dominant political and mercantile interests. Governor Henry Gage and other Republican state politicians interpreted the travel directives as a de facto quarantine imposed on the entire state. Their reaction was swift: Gage fired off a telegram to President McKinley, characterizing the planned federal action as "unwanted" and the product of "improper reflections" that would "outrageously" impair California's reputation. The governor demanded immediate relief for the people of the state, the traveling public, and the commercial interests of the Pacific Coast. Similar messages went to California's elected officials, congressional delegation, and party leaders, including delegates to the Republican National Convention. All were urged to make personal appeals to President McKinley, beseeching him to cancel Kinyoun's quarantine and remove him from his post.[7]

Republican newspapers such as the *San Francisco Chronicle* and *San Francisco Call* immediately began a campaign to discredit Kinyoun. Was he really an authority on plague? The *Chronicle* returned to the *Nippon Maru* controversy and the quarantine detentions at the Angel Island station. It accused Kinyoun of making selective and arbitrary decisions justified not by scientific principles but by the social prominence of passengers.[8] The *Call,* in turn, chose to portray

a condescending "epauletted" Kinyoun, safely ensconced in the Ferry Building, abusing his authority and showing off to frightened travelers who barely tolerated the "mummery" in their quest for railroad tickets.[9] Although deploring Kinyoun's actions, the *San Francisco Examiner* decided to put the blame for this federal intervention on the "infamous vilification" campaign conducted by its Republican competitors and local politicians who had been relentless in their efforts to discredit the San Francisco Health Board. In its view, Republican opponents of Phelan's Democratic administration "acted like criminals and fools." An editorial linked Kinyoun's decision for travel restrictions to the "folly and danger" of canceling the state quarantine system, predicting that this course of action would not protect the people of the United States from infection. Instead, "purification, disinfection, and quarantine will give the assurance to the world that we are honest and are able to cope with the trouble that has come to us."[10]

While politicians and the media pointed fingers, federal officials were busy implementing Kinyoun's orders. Crowds began arriving at Marine Hospital Service offices in the Embarcadero building, requesting the required health certificates. As described by a *San Francisco Chronicle* reporter, a line of twenty-five travelers patiently edged toward tables manned by clerks eagerly handing out applications. Name, age, address, place of birth, and number of luggage pieces were the only data requested during this perfunctory process. No one inquired about details of their stay in the city or whether the future passenger had visited Chinatown or had any contact with Chinese persons.[11] In a later memoir, Kinyoun rejected the notion that the ban was discriminatory. Regardless of race, the federal quarantine officer affirmed, it was his duty to deny the right to travel to any individual coming out of the infected district. At the same time however, Kinyoun complained about the "Chinafication of our government and glorious republic."[12]

The reality, however, belied his statement. Accompanied by clerks from the law offices of Reddy, Campbell, and Metson representing the Six Companies, several Chinese presented themselves at the same ferry depot. Easily spotted, Kinyoun personally refused to issue them certificates on the grounds that they were unvaccinated Chinatown residents. This blatant but anticipated example of discrimination allowed the same merchant from a previous lawsuit, Wong Wai, to swear out a second complaint in U.S. District Court against Kinyoun, asking that he be cited for contempt, as he had violated the May 28 injunction issued by Judge Morrow.[13] At the same time, the Chinese Merchants Exchange sent a telegram to President McKinley demanding to be "preserved from further

injury" since the out-of-state travel ban was designed to specifically affect Asians and damage their overseas business.[14] Informed of the lawsuit, Wyman ordered Kinyoun to seek counsel from U.S. District Attorney Frank L. Coombs, who was instructed to defend him in court.[15]

Coombs made his first appearance before Judge William Morrow the following day. To his surprise, he discovered that attorneys for the Santa Fe Railroad, worried about shrinking passenger service, were requesting a similar injunction. The district attorney argued that his client had not intentionally violated the previous judicial order and that border inspectors were already being withdrawn. The judge, however, insisted that the contempt procedures were legitimate; no regulations should have been implemented without direct authorization from the court. Coombs was given one week to prepare Kinyoun's defense. Reached in Washington, Wyman refused to discuss the case, suggesting that a competent health officer like Kinyoun would only have enforced federal laws after carefully considering the "requirements of safety and public health."[16]

Yet events far away from San Francisco cast a cloud over Kinyoun's quarantine. Selected members of the California delegation to the Republican National Convention, then in session in Philadelphia, went to Washington for a meeting with Secretary of State John Hay, who reassured his visitors that "Dr. Kinyoun's hasty order quarantining the state had not the sanction of the President."[17] In a subsequent audience with President McKinley, the so-called Quarantine Committee, which included John D. Spreckels, owner of the *San Francisco Call*, warned the president that if no quick action on the federal ban was forthcoming, California might well be lost to the Republicans in the November elections. Concerned about his own renomination, McKinley reacted to political pressure, declaring that he regretted Kinyoun's conduct and was most anxious to repair the injury done to California. After communicating with his Treasury secretary, the president sent an order to Surgeon General Wyman to suspend Kinyoun's quarantine measures. Aware that Washington politics often trumped decisions based on scientific facts, Wyman immediately sent a terse telegram to the quarantine officer in San Francisco: "Withdraw all inspections until further orders. Discharge all except border inspectors."[18] Acting Secretary of the Treasury Oliver L. Spaulding, in turn, informed Governor Gage of the president's decision, assuring him that Kinyoun had merely been executing department regulations.[19]

His travel ban shattered by presidential decree, a humiliated Kinyoun shifted his focus to quarantine duties on Angel Island, but his personal legal troubles persisted. After several meetings with Coombs, his appointed defender,

the federal quarantine officer became increasingly frustrated and suspicious. Coombs, according to Kinyoun, "treated me very much the same as if he was running a kindergarten."[20] He was told to plead guilty and throw himself at the mercy of the judge. The Six Companies and their stable of top San Francisco law firms, including senior litigator Samuel M. Shortridge, a Republican and presidential elector-at-large for President McKinley, worked hard to achieve a conviction.[21] A member of several San Francisco social clubs, Shortridge was well connected and close to Governor Gage. To his horror, Kinyoun discovered that Coombs had conferred not only with Judge Morrow and Shortridge but also with the governor, a fact that suggested that Gage was probably the chief instigator of the current lawsuit.[22]

For Kinyoun, the stakes were high: if found guilty in court, he could face at least twelve months in jail. In a panic, he repeatedly requested additional legal assistance from Washington, but Wyman rejected it following consultations with Treasury officials. No further instructions went to Coombs. "It then became evident to me that I was to be made the scapegoat for other people's sins, and be sacrificed in order that those in Washington could maintain a respectable countenance," explained Kinyoun.[23] Back in court on June 25, Coombs promised to furnish all telegrams and official letters exchanged between Kinyoun and the service's office in Washington, but the case was adjourned for another week. Wyman, meanwhile, was having second thoughts; he contacted Coombs and suggested "prompt and vigorous" actions to prevent a guilty verdict and jail sentence for his subordinate, including a plea of habeas corpus. If the federal officer went down to defeat, the entire federal quarantine system in San Francisco would suffer.[24] Kinyoun, for his part, decided not to take any chances. If found guilty, he would, with private funds, file appeals all the way to the Supreme Court.

According to Kinyoun's version of events, a chance encounter on July 1 radically changed the anticipated outcome of the trial. Instructed by Wyman, Kinyoun visited Judge Morrow's chambers about an unrelated matter but failed to find him. Returning to the quarantine station the next day, Kinyoun spotted Morrow on the ferryboat to Tiburon, and both went inside to discuss Wyman's telegram. The public conversation, according to Kinyoun, became quite animated, eventually shifting to the topic of plague and its purported presence in Chinatown. Morrow admitted that his declaration in the Ho Jew case about plague not being present in San Francisco was just personal, without legal foundations. The judge seemed impressed with the scientific evidence proving the

existence of the disease in Chinatown, which had been suppressed during the previous trial. For his part, Kinyoun tried to reassure the judge that his actions had been guided by "the constitutional requirements designed to regulate commerce between the states." Both men seemed to agree on the frequent unconstitutionality of federal interventions, especially in matters dealing with sanitation. Morrow urged Kinyoun to consult with him in the future whenever he was in doubt about the legality of any quarantine regulation. In the end, in Kinyoun's words, Morrow "acted like a changed man."[25] Had Governor Gage and Coombs misled him?

Emboldened by the conversation and convinced of Coombs's duplicity in the case, Kinyoun contacted Shortridge and former judge James McGuire, who were prosecuting him. He offered to cooperate and provide evidence, previously rejected by Coombs, of orders and telegrams to and from Washington documenting his activities. At a final hearing, Kinyoun pleaded with the judge for clemency, promising not to implement any further quarantine regulations without explicit orders from Washington and the consent of Governor Gage.[26] After further consideration and with District Judge John J. De Haven concurring, Morrow finally ruled on July 3 that there was insufficient evidence concerning Kinyoun's personal role in the discriminatory travel ban against Chinese, thus exonerating him.[27]

The removal of the federal blockade prompted the Six Companies to telegraph the good news to the Tung Wah Dispensary in Hong Kong, asking hospital staff to convey the information to the surrounding Guangdong Province villages and to all those concerned with events in San Francisco.[28] Kinyoun's defeat and the previous lifting of Chinatown's quarantine imposed by the local health board triggered one last action: every Chinese resident received a "manifest of losses" suffered during the early months of the quarantine in Chinatown. Consul Ho Yow explained that all affected residents, especially the merchants, should determine the extent of the economic damage for demands of future reimbursement. John Bennett, together with other law firms on retainer, became adviser for a Chinese Relief Committee. Forms were filled out that listed every store and proprietor, capital invested, and estimates of losses incurred during the suspension of business due to quarantine measures. All lists were expected to form the basis for another lawsuit claiming damages against the city of San Francisco or the federal government, which attorneys for the Six Companies estimated would reach about $2 million.[29]

After his judicial troubles and multiple court appearances, Kinyoun was under no illusion that powerful political and mercantile forces, as well as the Chinese

leadership, would continue trying to oust him from his position.[30] In a summary prepared for publication, he defended his actions, blaming state quarantine officials for failing to understand or care for the new federal laws and regulations.[31] In addition, the federal quarantine officer singled out the California railroad interests, notably the Southern Pacific Railway and steamship companies under its control, for interfering with sanitary authorities. As price for his treachery, the Republican Party rewarded Coombs with a congressional seat.[32] In the meantime, having failed to remove Kinyoun by legal means, San Francisco's commercial circles now lobbied the California congressional delegation to pressure the federal government and ensure Kinyoun's dismissal. Yet more plague cases continued to be found in Chinatown. The fundamental causes for the existence of this disease—the district's alleged "foulness"—demanded rigorous compliance with health ordinances "to make it a decent part of a civilized community." Local failure to enforce sanitary laws could not continue. Perhaps Chinatown's property owners—as in other districts of the city—should be compelled to bring their buildings into conformity with existing regulations.[33]

Valuable Real Estate: Planning Chinatown's Removal

How to rid Chinatown of plague? After the failed quarantines and travel embargoes, that was the question in the minds of leading San Francisco health officials. More drastic suggestions included the targeted burning of infected houses, a method Hawaiian authorities had employed in fighting the epidemic in Honolulu in 1899, albeit with tragic consequences. The San Francisco Health Board listened to a presentation by Charles B. Cooper, president of the Hawaiian Medical Society, on his experiences with the lethal disease. Cooper considered fire the ultimate disinfectant for sterilizing sewage-contaminated soil.[34] The idea of burning houses to kill plague germs had already been recommended in 1894 during the first Hong Kong epidemic, both by the local sanitary board and Japanese bacteriologist Shibasuburu Kitasato.[35] The torching was first carried out in that city's walled-in and overcrowded district of Taipingshan, composed of old, dilapidated dwellings fronted by narrow lanes with imperfect drainage. Close to four hundred houses were pulled down, the debris burned, and the owners compensated.[36]

Following the death of Wong Chut King in early March, the *Chinese Western Daily* began speculating whether anti-Chinese forces would use the plague discovery as an excuse for setting fire to the district.[37] Such an option was based on

Mayor Phelan's threat to burn down Wong's last domicile, the Globe Hotel.[38] Health board member Louis Bazet, meanwhile, managed to pass a resolution ordering a ban on all underground lodgings in the city, especially in Chinatown, and improving sanitary conditions in all dwellings at owner expense. However, the ban was ignored, viewed as posturing by freshly minted Democratic bureaucrats.[39] Yet calls for targeted fires continued. By the end of May, health board member William McCarthy was quoted as saying that "infected houses ought to be burned. Fire will kill the germs better than anything else." Moreover, "every Chinese in Chinatown ought to be removed to a detention camp somewhere in the hills." Even D. D. Crowley from the state health board agreed.[40] A newspaper editorial put it bluntly: "The only way to get rid of that menace [plague] is to eradicate Chinatown from the city . . . clear the foul spot from San Francisco and give the debris to the flames."[41]

Chinatown residents suspected that temporary removal and detention were just an excuse, a preliminary step to razing the entire quarter. San Francisco officials had long plotted to expel them from their district and thus recover prime real estate for redevelopment, a move confirmed by a Chinese worker employed in the health department. Yet, a *Chinese Western Daily* reporter interviewing George F. Shrady, a prominent New York physician sent by the *New York Herald* to check out the plague claims, told Shrady that the Chinese would "rather die than have our town burned. There may well be a way out if residents could be compensated when the district's houses and their contents are consigned to flames, but the Chinese will never allow themselves to be trampled."[42] So far, the scheme to destroy the quarter was only failing because the health board lacked enough money and feared the wrath of the local business community if trade with China was compromised.[43]

Since the district remained a menace to San Francisco's health, the proposed solution was to "make over"[44] Chinatown.[45] Based on the new city charter, a scheme for "permanent relief" required the involvement of the Board of Supervisors. However, on recommendation from the Board of Public Works, this body could immediately order the necessary improvements and assess the owners of Chinatown and North Beach properties benefiting from them. Beginning with Dupont Street, the major thoroughfare, streets could be widened and repaved with bitumen, small alleys and cul-de-sacs eliminated, fire limits extended, plumbing and sewerage regulations enforced. According to experts, Chinatown properties, worth approximately $50 million, represented nearly 12 percent of San Francisco's real estate value.[46] The area was eminently suitable

Need for a makeover: Chinatown lodgings, ca. early 1900s.
Williamson album (author's collection).

for commerce and lodging for middle-class San Franciscans. From a Chinese viewpoint, threats from incompetent and dishonest inspectors and the previously aborted quarantines were designed to extort money from scared Chinatown merchants. No one was naïve enough to believe that the authorities would give up on their ultimate objective: permanent removal. Having unsuccessfully tried to solve the plague problem with two aborted health-board-ordered quarantines and a canceled federal travel ban, leading local businesspeople were eager to find another remedy.

By late June, the San Francisco League of Public Improvement met and resolved that the time had come to evict Chinatown from its current location. Resettled elsewhere, the Chinese would be required to conform to the same sanitary, police, and fire regulations currently enforced in all other parts of San Francisco. Because of the plague scare, states like Colorado and Texas had already embargoed all merchandise coming from San Francisco. Could a gentri-

fied district emptied of Chinese people allay all suspicions at home and abroad about the existence of plague in San Francisco? The league pledged to create an advisory board of one hundred reliable businessmen who would investigate Chinatown's conditions and advocate proper measures. Unsanitary buildings could be razed without replacements; enforcing fire regulations would diminish the current density.[47]

Yet, commenting on the league's proposal, one newspaper warned that such removal could never be accomplished without consent from the Chinese. Plans for burning Chinatown to the ground or removing its residents by force had long ago been determined illegal: "No action could be taken against the Chinese as a class that would not immediately be stopped by the federal courts as violating the U.S. Constitution."[48] Instead of expulsion, "the rich men who own that property should be compelled to keep it clean," with all costs of abating nuisances created by the Chinese becoming a lien on property instead of imposing further burdens on the city. Although owners of infected houses would undoubtedly protest, they had no right to preserve "this sore in our midst."[49]

Perhaps it was time to lean on Chinatown landlords. Under the front-page headline "Widen Streets of Chinatown and Purge Place of Its Evils," the *San Francisco Chronicle* published a detailed map of Chinatown with a complete list of all current property owners and the size of their respective lots. This disclosure in its Sunday edition allowed readers to identify landowners like Mayor Phelan and his relatives, the family of Police Chief William P. Sullivan Jr., tycoons and their widows, banks and trading firms, individual "capitalists," and wholesale grocers.[50] The veiled message was simple: cooperate for the sake of San Francisco's well-being or be branded as selfish and dangerous obstructionists who wished to perpetuate a notorious "plague spot." The proposed gentrification would generate higher rents, possibly forcing the thrifty Chinese to leave and "hunt for cheaper quarters" elsewhere. In this fashion, Chinatown could be gradually renovated and incorporated into the central business district without forceful evictions.[51]

Alarmed, the Chinese sought further information about the rebuilding scheme. Reporters from the *Chinese Western Daily* interviewed leaders of the San Francisco Chamber of Commerce who favored removal but remained dubious about the willingness of property owners to participate in spite of appeals to their civic pride. Visits with selected property owners revealed unanimous resistance to the plan. Most seemed satisfied with the returns from their investment and leery of making drastic changes. Landlords knew that their buildings were not

fancy, but they seemed happy to continue renting them to the uncomplaining Chinese. Some suspected that the Chinese, regardless of their financial status, would ultimately pay more rent rather than leave their current places. Because of the longer leases, residents had furnished their stores and residences in Oriental style, becoming quite attached to them and thus unwilling to move. Both parties, owners and renters, saw little need for change. All agreed that cleaning up and retrofitting particular buildings was the best solution.

Anticipating renovations, someone suggested to Chamber of Commerce officials the creation of a new Chinese district elsewhere in the city, furnished with its own stores and living spaces, although most doubted that this scheme would appeal to current Chinatown residents. To find out, John Partridge, a local importer, printer, and publisher, visited the *Chinese Western Daily*'s offices, claiming to own land south of the city and close to the bay, only a few minutes away by train. This entrepreneur promised that if the Chinese were willing to move there, he would erect all necessary buildings and charge fair rents. "Those of us who were in the office berated his idea as a madman's fantasy and told him to go somewhere else to seek his fortune," wrote the editor.[52] Instead of being forced into relocation, the newspaper once more urged residents to clean up their present homes for the sake of the community's survival.[53]

At the same time, the Chinatown Property Owners Association, with Joseph Goetz as president, W. G. Johnson as secretary, and Joseph Rothchild as their attorney, announced that their group of more than two hundred members was concerned about the "machinations" of the San Francisco health authorities. Through its "continual nagging" and quarantines, the health board had "killed off rents and profits," creating "perpetual turmoil." While owners readily acknowledged that health laws should be enforced, they objected to the scheming, swindling, and unnecessary "grafting." In the end, the landlords collectively agreed to resist all attempts to widen or pave streets and rejected calls for improving the buildings at their expense.[54]

Not surprisingly, the local newspapers strongly criticized the actions of the Chinatown Property Owners Association. No owners had ever been arrested by health officials for violating public health regulations. Their flagrant offenses were grounds for a grand jury investigation.[55] Instead of employing expensive lawyers to fight sanitary laws, they were urged to use their resources to hire workers who could fix their buildings.[56] If property owners refused to reconstruct Chinatown, San Francisco citizens would take over the task. All municipalities possessed powers to implement civic improvements through the issuance of

bonds. With these loans, the entire Chinese district could be condemned. There was also the option of creating a public park or assigning lots for new construction.[57]

With only two probable cases of plague—one non-Chinese—reported during the summer and fall, the issue of eviction lost urgency, until John Bennett, counsel for the Six Companies, published a letter about current conditions in Chinatown. In spite of efforts by the permanent population to keep their premises clean, the attorney blamed transient workers for the district's unsanitary conditions. Bennett revealed that property owners, perhaps influenced by previous complaints, now appeared to shift all maintenance work to their renters. The Six Companies issued a proclamation directing Chinese occupants to notify their landlords of deficiencies and request repairs. If property owners ignored the request, tenants, after ten days, should proceed with renovations and deduct the cost from future rents. However, to their surprise, many Chinatown residents discovered that the fine print in their contracts already included a clause forcing them—not the landlords—to make and pay for all repairs. Most professed ignorance about this item in their leases and insisted that they had no money for fixing up their premises. With both sides unwilling to assume responsibility for maintenance, the deplorable conditions so widely criticized by health authorities and the press were bound to worsen.[58]

Responding to Bennett, the *San Francisco Chronicle* interviewed one of the best-known real estate agents in the city, H. P. Umbsen, who represented many Chinatown landlords. Umbsen agreed with Bennett's statements about the leases but suggested that the unsettled condition of Chinatown's real estate market was the real culprit. Owners expected that "something sooner or later will be done toward eliminating Chinatown."[59] Because of the uncertainty, the value of property in the district was more difficult to appraise than anywhere else in San Francisco. Many buildings were at least forty years old and thus unacceptable to non-Chinese. The whole matter returned to the original problem: the Chinese refrained from demanding better conditions and willingly continued paying higher rents, while the owners supported the status quo, letting the properties deteriorate even further. According to Umbsen, "only outside demands by the public will work reform in Chinatown."[60]

Just a day later, the same newspaper published details of the earlier project authored by John Partridge, the Canadian entrepreneur, variously listed as an importer and manufacturer, printer and publisher, lithographer, and bookbinder. Through his paper business, he gained access to politics (he was a Republican

county official), capital investments, and interest groups. According to the plan, Chinatown could be easily removed from its present location to a new city. Partridge claimed that his idea derived from recent quarantine events and the realization that "Chinatown could never be put in perfect sanitary condition." Only twenty-five Chinese individuals owned properties in Chinatown, while more than two-thirds of current proprietors failed to obtain sufficient revenue from their holdings. Under these conditions, Partridge suggested relocating Chinatown to a large tract of land in South San Francisco already secured by a group of businessmen who would form a building association exclusively composed of Chinese investors. The scheme had apparently been presented twice to the Chamber of Commerce and the Chinese in early July.[61]

Partridge's somewhat utopian proposal envisioned that the relocated Chinese tenants would become homeowners within ten years, with an outlay equivalent to their current rent. Built in Oriental style and studded with light and healthful buildings, the new city could become an even greater tourist attraction than the present Chinatown. Served by electric train lines on tracks owned by the Southern Pacific and Santa Fe Railways, the area could be reached easily from the city. Cargo from Asia would be brought directly by ships from San Francisco docks to the new city's anchorage on San Francisco Bay. New business and additional trade were expected. If local business circles agreed to support the project, Partridge was certain that the Six Companies would cooperate. The scheme should "appeal to the Chinese from a pecuniary standpoint as well as from a sanitary necessity."[62]

In a letter to Wyman, Kinyoun agreed with the notion of destroying or removing Chinatown: "I am almost at the point sometimes of stating that plague will exist in Chinatown until the district, now occupied by the Chinese, has been depopulated and destroyed." Kinyoun judged the tragic events in Honolulu as fortuitous: "The circumstances which led to the destruction were well timed and were consummated so quickly that it was done before anyone could interfere."[63] San Francisco, however, was not Honolulu, and the battle between the warring factions was far from over.

Plague Diagnoses: A Quarrel between Experts

Professional wrangling about the presence of plague intensified. Diagnoses mattered. They could be frightening and stigmatizing to the family and friends of the victims and also have profound political and economic consequences. The

sickbed and autopsy table were sites for a protracted ground war fought between two contending parties. San Francisco Health Board members, health officer Aloysius O'Brien, and city bacteriologist Wilfred Kellogg lined up on the side of experts who insisted that bubonic plague was present in Chinatown. Louis Bazet and Andrew Henderson, both members of the state health board, together with several academics, including Douglass Montgomery from the University of California Medical Department, Oakland bacteriologist Henry Ryfkogel, and William Ophuls, a pathologist from Cooper Medical College, strongly supported them. All possessed solid bacteriological credentials.

Firmly denying the existence of this scourge were physicians like Henry D'Arcy Power, David Hodghead, and Ernest Pillsbury, retained by the Chinese leadership, together with Tung Wah Dispensary medical staff members George L. Fitch, Boudinot Atterbury, Minnie Worley, and Lydia Wyckoff. Also supporters of the no-plague stance were surgeons Winslow Anderson from the College of Physicians and Surgeons of San Francisco and Charles N. Ellinwood from Cooper Medical College. Their only consulting bacteriologist was Silas M. Mouser, lately hired as an expert for the state board. Mouser was a 77-year-old general practitioner with a degree from Starling Medical College in Ohio who, in later years, became interested in microscopy. As the dispute continued to spill onto the national scene, the stakes became higher, the disagreement more vehement. Increasingly frustrated, Kinyoun went as far as calling practitioners hired by the Six Companies "nothing more or less than vampires," engaged in their work to please their Chinese masters and earn a generous honorarium.[64]

Plague diagnoses constituted critical evidence for framing policies and designing strategies necessary for dealing with the continuing outbreak. Both sides exploited aspects of the ever-shifting biological knowledge to buttress their competing claims, exposing the ambiguity and malleability of science as well as the fallibility of its politicized practitioners. Bacteriology was still a budding medical science; acting on its findings sometimes led to confusing and unpredictable results. Not surprisingly, the Phelan appointees, barely six months into their jobs, wished to demonstrate their medical professionalism and executive savvy. The bacteriological smears not only revealed the presence of germs on glass plates; they came to reflect the professional credibility of contending physicians, especially those placed under the microscope of newspapers hungry for sensational headlines and dramatic stories. Played out in public, these quarrels in San Francisco managed to generate doubt and distrust at a time when physicians around the world proudly touted the miracles of modern medical science.[65]

In the aftermath of 40-year-old laborer Dang Hong and 49-year-old cigar maker Chen Kuey Kim's contested plague deaths, the health board announced that physicians hired by the Six Companies would henceforth be barred from attending all postmortem examinations of suspicious Chinese fatalities.[66] Board member William D. McCarthy sponsored an act calling for a fourteen-day home quarantine for Pillsbury, Hodghead, and Power, because their Chinatown visits allegedly placed them and their patients at risk of infection.[67] The Six Companies were asked to appoint other representatives. Pillsbury, the only properly qualified opponent, was singled out and not only denied attendance at autopsies but also prevented from carrying out independent bacteriological studies related to plague. Presumably, the ban was punishment for his unlawful removal of tissues from the body of Chen Kuey Kim; even Pillsbury's laboratory was quarantined.

In frustration, this much-maligned academic accused Kinyoun of providing Kellogg with cultures of plague bacilli received from India for his diagnoses. The city bacteriologist was suspected of deliberately infecting tissue samples obtained from Wong Chut King, the first official plague victim, fabricating the necessary evidence for the quarantine.[68] The health board responded by characterizing Pillsbury as a disgruntled former candidate for Kellogg's position in the health department who was seeking revenge. Pillsbury further antagonized board members by vehemently protesting the mutilation of Chinese corpses during autopsies, correctly claiming that these procedures contributed to Chinese anguish caused by the dismemberment that prevented such bodies from being "shipped back to China."[69] His objection occurred following the death of Jay Man Tong, a 50-year-old merchant and prominent official of the Six Companies who had died suddenly on June 9 after suffering from cough and chest pains. Diagnosed by Pillsbury as suffering from heart disease, his death certificate listed angina pectoris as the cause of death. Nevertheless, Kellogg insisted on performing an autopsy. To make matters worse, John Williamson, president of the health board, refused Pillsbury and Hodghead access to the examination. As in earlier cases, the autopsy findings were ambiguous. Jay's obese and quickly decomposing body yielded few signs suggestive of plague. To Kellogg, initial smears taken from tissues appeared to reveal a small number of plague bacilli, but guinea pigs injected with an emulsion from this material failed to confirm the diagnosis. However, Kinyoun persisted with a series of secondary inoculations, eventually claiming success, and Jay became officially plague case number 12. In his report to the health board, Kellogg presented a dozen confirmed

plague deaths since early March, speculating that the disease had been present in San Francisco since November 1898, when Worley reported a number of suspicious deaths in Chinatown.[70]

In retribution, the *San Francisco Chronicle* began an extended campaign of vituperation targeting Kellogg. He was portrayed as obsessed in his frantic search for plague victims. Several reported "suspicious" cases turned out to have died of other ailments; some were long-term consumptives. Portrayed as the "infant bacteriologist" with a "wobbly reputation,"[71] Kellogg was accused of failing to protect himself and everybody else from infection by wearing his customary street clothes when performing postmortem dissections. Worse, he allegedly worked barehanded and without a head cover while assistants used rubber clothing for this task. The newspaper described how this zealous "young man" placed his tissue samples from dissections into a stone bucket with a loose-fitting lid, ambling to the detention tent for a brief spray of formalin before donning an overcoat. With his loaded bucket in one hand, Kellogg was allegedly observed crossing the quarantine lines and hopping into a streetcar toward his City Hall laboratory, mingling with other passengers. In the newspaper's view, this careless behavior risked spreading the contents of his "death-laden" pail to a crowd of San Franciscans.[72]

Jay Man Tong's case also became a turning point for two members of the state health board, Louis Bazet and Andrew Henderson, both outspoken partisans of the notion that plague existed in Chinatown. Bazet's disagreements with the governor had become quite personal and public, with Gage accusing him of injuring the state by his insistence that there were plague cases in San Francisco. Bazet, who was also a member of the San Francisco Health Board, officially resigned his state post on June 17, telling reporters, "I would not serve under a man who has introduced politics into health matters. I am no politician . . . medicine is my profession."[73] Henderson had maintained a similar position after preparing his own microscopic slides from Chen Kuey Kim's tissues in his Sacramento laboratory, but his term had officially expired. Bazet and Henderson's departures allowed Gage to reorganize the state board and appoint replacements who were outspoken foes of the notion that plague existed in California. Among them was Winslow Anderson, a graduate from the University of California Medical Department specializing in general and abdominal surgery. Already a confidant of the governor, Anderson was editor and proprietor of the *Pacific Medical Journal,* a publication that consistently denied the presence of plague in the city. Gage placed him in charge of three new state medical

inspectors—Hodghead, Power, and Pillsbury—the three physicians previously employed by the Six Companies to check all deaths in Chinatown.[74] In the meantime, the federal court issued a preliminary restraining order against the San Francisco Health Board for interfering with Western physicians attending Chinese patients. In an effort to stop the "dark lantern" dissections Kellogg secretly conducted in Chinese coffin shops, Judge Morrow also restored the right of outside practitioners to witness autopsies, setting the stage for further strife and dissent.[75]

To further consolidate California's antiplague position, Gage called on a group of prominent local physicians. Among them were Levy C. Lane, a professor of surgery and president of the Cooper Medical College; Charles N. Ellinwood, professor of clinical surgery at the same school and secretary-treasurer of Lane Hospital in San Francisco; Edwin S. Breyfogle, a faculty member from the San Francisco Homeopathic Medical College; and Winslow Anderson, now promoted to surgeon general of the National Guard of California.[76] At first blush, Gage's lineup appeared impressive, studded with distinguished academics drawn from two local medical schools. However, Lane, age seventy, and Ellinwood, age sixty-six, were veteran surgeons with solid professional credentials, but they hailed from the prebacteriological age.[77]

To bolster the no-plague argument, Ellinwood sought to refute the presence of plague among the trickle of suspicious Chinese cases by contrasting it with a notorious plague outbreak in Vienna two years earlier, widely reported around the world. The incident happened in an isolated Institute of Pathology laboratory at the famous Vienna General Hospital. Herrmann F. Müller, a prominent student of bacteriologist Von Ziemsen, returned from India with some cultures obtained while plague was raging in that country. Operating carelessly, three of Müller's assistants became infected and all soon died of pneumonic plague, threatening a major institutional outbreak. While further cases were prevented, the local medical authorities immediately took emergency measures and remained on high alert, a testament to the lethality of plague and the need for special care in handling highly contagious bacteriological material.[78]

A day later, the governor of California, in what almost looked like a choreographed event, retold the same Viennese episode to reporters, calling attention to the fact that Kinyoun possessed similar highly contagious plague bacilli at his Angel Island laboratory. Gage suggested that, as in Austria, these germs were escaping from the federal officer's "bubonic pig pen," contaminating his experimental animals, a process that explained Kinyoun's plague diagnosis of Wong

Chut King. More troublesome was Gage's charge that Kinyoun, San Francisco Health Department officials, and state board member Henderson exhibited reckless behavior in their handling of tissue samples that could potentially start a real and uncontrollable epidemic in the city. Preying on widespread public bacteriophobia, the governor urged legislation prohibiting the importation of all bacteriological cultures except under supervision of a new and special state bureau.[79] Interviewed by a reporter from the *Chinese Western Daily*, Ellinwood dutifully repeated details of the 1898 accident, stressing the dangerous and irresponsible conduct of those who were diagnosing plague in Chinatown. Contrasting his forty years in medical practice, the surgeon complained that Kellogg had only undergone two years of postgraduate training; if true plague were to break out in Chinatown, people like Kellogg running around with their plague buckets surely would be the culprits.[80]

Soon thereafter, another effort to challenge Kellogg's bacteriological findings took place: the San Francisco Clinical Society adopted a resolution expressing its firm conviction that "no case of plague exists or has ever existed in the city of San Francisco." Composed of older, seasoned physicians, the society pointed out that none of the presumed plague cases exhibited a clinical history characteristic of this disease. Standing alone, the bacteriological evidence could never be conclusive. A local medical journal quickly reacted to the society's resolution, insisting that complete reliance on clinical histories was no longer good medicine; experts considered laboratory tests "absolutely necessary for complete and reliable diagnoses."[81] Sensing disagreements among medical professionals, local newspapers defended the right of "common sense" laymen to question "the dictum of doctors" in spite of the fact that Americans, "at the front rank of civilization," would consider this attitude "ridiculous." Scientific claims were always subjected to challenges and revisions. Nearly one hundred days since the "discovery" of plague in Chinatown, and without observing a single living case, the available information challenged the testimony of microscopic slides and bacteriological cultures. Simply placing the medical profession on a pedestal could be detrimental. There was something worse than bubonic plague: a corrupt municipal government that "allowed people to be frightened by plague fakes."[82] As usual, Spreckels's *San Francisco Call* chimed in with an editorial, appealing to the medical profession "to purge itself" of men who blithely injected live monkeys with macerated tissue from dead people and then claimed to have found plague. "That is not medicine," decried the paper, "it is monkey shine and the monkey is the more intelligent party."[83]

When a 40-year-old laborer, Lee Wing Tong, died in the San Francisco City and County Hospital, the antiplague coalition of Republican state officials, business interests, local newspapers, and conservative physicians found even more reasons to vilify Kellogg and members of the embattled health board. According to a companion, Lee apparently had been well until four days earlier when he felt tired and depressed, had a high fever, and drank large quantities of water. He was confined to his bed for two days prior to admission. Called to see him on July 4, Pillsbury sent Lee to the hospital with a brief note suggesting that the patient probably suffered from typhoid fever. Unlike most residents from Chinatown, Lee was, surprisingly, admitted and found to have swollen and tender inguinal glands. Immediately transferred to an isolated pavilion, he remained delirious and semiconscious until his death two days later. Except for Power, all those present at his autopsy agreed that the patient probably suffered from bubonic plague. Subsequent animal inoculations seemed to confirm the plague diagnosis. Pillsbury was forced to report these findings to his employers, the state health board, and the Chinese Six Companies, incurring a temporary suspension of his services.[84] At last, Lee was the first plague victim observed clinically in a reputable hospital setting instead of dying alone in a Chinatown hovel. The case promised to settle the plague question in favor of the health board and its allies.[85]

However, according to the *Chinese Western Daily*, some health board officials commissioned a second, unbiased opinion from an outside expert. For reasons that remained murky, they selected none other than Silas Mouser, who had apparently followed the current patient's case closely. Characterized by the antiplague press as a "pioneer bacteriologist and scientist," Mouser's predictable conclusions, summarized in a report sent to the health board, differed dramatically from the official conclusion. Mouser announced that his test animals, several guinea pigs, were not affected by the injections of blood obtained from the victim. Three weeks later, on July 25, Bennett, attorney for the Six Companies, officially notified the health board of Mouser's negative findings.[86] Since they challenged the board's official assumptions, the document was ignored and suppressed; publication occurred only after legal threats from the *Sacramento Bee* newspaper.[87] Lee's death further diminished the credibility and professionalism of the San Francisco health authorities, already assailed by Supervisor McCarthy, showing the lengths they were willing to go to in sustaining their plague hypothesis. Then the other side made a similar tactical error. Following the October death of another Chinatown resident, Ryfko-

gel, now working for the state health board, was called to independently check and challenge one more presumed plague diagnosis. An early believer in the presence of this disease, the bacteriologist disappointed the governor and his handpicked board by siding with Kellogg and Kinyoun's findings, an action that soon cost him his job.[88]

Mouser continued challenging the veracity of plague diagnoses. Much was at stake for both sides. Anderson's *Pacific Medical Journal* incorrectly boasted that George M. Sternberg, surgeon general of the U.S. Army and one of the leading bacteriologists in America, had previously praised Mouser's laboratory work.[89] The Chinese, for their part, considered Lee's plague diagnosis an "insult" to their collective reputation. Pillsbury was finally fired by the Six Companies after agreeing with another plague diagnosis for a Chinese patient, Hon Ton, he had personally treated for mumps in August.[90] The *Chinese Western Daily* accused the health authorities of eagerly using the opportunity to cover up prior false accusations regarding the presence of plague in the district: "The more they slander others and falsify facts, the more they damage themselves."[91]

Kinyoun believed that delayed bacteriological confirmation through pure cultures obtained after weeks of animal inoculations were puzzling to the Chinese and only increased their skepticism. His final report of the bacteriological examinations performed on tissues from Lee Wing Tong included smears, cultures, and animal inoculations in monkeys, rats, and guinea pigs, all of which revealed the presence of the plague bacillus.[92] In view of such exhaustive and precise studies, the federal quarantine officer confidently ended his report declaring that even the most unprejudiced and skeptical observer would find his chain of evidence compelling enough to accept the presence of plague infection in San Francisco.[93] Unfortunately, such persons could no longer be found in the city. The combatants continued their jousts; neither side conceded defeat. Subsequent plague deaths in October and November, including two non-Chinese, prolonged the sparring. Mortuary records reveal twenty-eight Chinese fatalities, with death certificates from Assistant City Physician Frank Wilson, due to "interstitial nephritis" (kidney disease), all without pathological confirmation. Whether some individuals had succumbed to plague remained pure speculation. Kinyoun guessed that physicians unfamiliar with the clinical manifestations of plague were treating milder forms of the disease under other diagnoses without intent to deceive the authorities. Only twenty-two cases were tallied as true victims of the plague for the year 1900. Cultural dread and lodging arrangements seemed to safeguard residents from interhuman contagion.

Secluded, many Chinese bachelors slept and cooked in their own small rooms or closets. If sickness occurred, concerned roommates or neighbors tended to sequester such persons, quickly packing their own belongings and exiting the building.[94]

Tarnished Image: Plague, Boxers, and Reformers

The disputes about the presence of plague in Chinatown occurred against a backdrop of profound social change, religious tensions, and a broad-based program of political reforms in the homeland. These tragic events in China played an important role in shaping San Francisco's views of its Asian immigrants and, more importantly, influenced the character of the public health response. The presumed plague outbreak constituted a severe setback to the efforts of Consul General Ho Yow and Chinese minister Wu Tingfang to develop better relations between China and the United States. Although vigorously defending their people in the district during successive inspections and quarantines, both diplomats also sought to pursue a policy of mediation and cooperation with local, state, and federal authorities. Prior to the plague outbreak, Consul Ho made considerable efforts to cultivate the mercantile elite in San Francisco, socializing with members of the Bohemian Club, making donations to the University of the Pacific, and including Chinatown in local festivals and parades. Both he and Wu Tingfang made special appeals, spurring American enterprises to contribute toward the industrial development of their homeland. The opportunities were now greater than ever before because the U.S. occupation of the Philippines had brought commercial centers such as Hong Kong and Canton closer to the American sphere of interest. All such plans depended in large measure on the image China and its American "colony" projected to those in power.

Despite the initial anxiety in San Francisco about a full-blown plague epidemic, Ho spent considerable time discussing trade issues and publishing a series of essays about the attitude of the United States toward the Chinese and the benefits Westerners would reap from China's development.[95] Ho attempted to counter a darker vision, recently emphasized by John P. Young, editor of the *San Francisco Chronicle*. Young's assumption was decidedly protectionist: modernization of China and its industrial development could in the long run be detrimental to America. Blessed with vast natural resources and a large population, the country would generate immense exports, inundating the United States with cheap goods without importing much in return because the frugal Chinese

lifestyle inhibited conspicuous consumption. The specter of closing iron foundries in Pennsylvania, cotton mills in Massachusetts, and furniture factories in Michigan were part of a frightening scenario if Asian trade boomed. Ho's counterargument, favoring modernization and trade, sought to convince Americans that his country desperately needed investments and machinery to put its poor people to work. Once enough wealth was produced, the Chinese lifestyle would be radically altered, creating more demand for foreign goods, a development already under way in certain coastal areas thanks to remittances from migrants living abroad. In short, Chinese could become typical capitalist consumers.[96]

After the appearance of plague, several consular proclamations had urged residents to comply with sanitary inspections and disinfections. Unfortunately, aggressive home invasions and the fracas of the Haffkine vaccination campaign triggered widespread protests and near riots among angry Chinatown residents, who not only opposed but even physically threatened their leaders. Such scenes of turmoil and resistance fueled further anti-Chinese sentiment. Yet the Chinese leadership successfully fought to avoid conversion of the Tung Wah Dispensary into a lazaretto or detention center for housing suspected plague victims. Such a transformation would have virtually shut down the institution's outpatient services. Regrettably, under political pressure from Mayor Phelan, Tung Wah sponsors, including Consul Ho, were forced to compromise, allowing the temporary admission and quarantine of potential cases. Although San Francisco authorities failed at first to find a single living patient suffering from plague, the dispensary's image suffered; many Chinatown residents now viewed the space as one of segregation and death, as they did Western hospitals.

By the summer of 1900, both Ho Yow and Wu Tingfang were shocked by sensational news coming out of China: a profound social upheaval under way since 1898 had transformed into a full-blown rebellion. At first glance, the movement appeared to be a grassroots protest of disgruntled peasants in Shandong province objecting to the excessive influence of foreign missionaries and their Chinese converts. Trained in martial arts for mutual protection, the kickboxing anti-Christian militia merged with disbanded soldiers and other groups seeking the fall of the Manchu government. Growing increasingly violent, they formed mobs and attacked missions, killing Western clergy and thousands of "rice Christians."[97] The rebels' strong anti-Western bias fed on anxieties about the deleterious impact of Christianity and its aggressive proselytizers on Chinese village life and culture. Many also opposed the profound changes produced by technologies such as railroads, steamboats, telegraph systems, and mining tools, which

seemingly threatened the Chinese cosmological order. As the "Society of Right and Harmonious Fists" spread to other northern provinces, conservative imperial officials tolerated, and even encouraged, these militias, conceiving of them as a useful tool for expelling foreigners and thus halting their modernizing influences.[98]

After sacking the international port of Tianjin (Tientsin) in late June, the so-called Boxers advanced toward Beijing, occupying the capital and laying siege to the foreign legation quarter. This move triggered an immediate international crisis, as conflicting news suggested a massacre of diplomats and staff members at various European embassies.[99] A hastily organized international force was dispatched to China. Its mission: retake Tianjin and break the Beijing encirclement, rescuing all remaining diplomatic personnel. Dramatic headlines and horrific, uncorroborated stories of torture and beheadings of men, women, and children shocked readers, causing a fresh wave of anti-Chinese sentiment around the world.[100]

Rumors from Washington, DC, suggested an imminent riot in San Francisco targeting Chinese in retaliation for the Boxers' gruesome killings of Westerners. In early July, the *San Francisco Chronicle* printed an extensive interview with the consul general about the tense situation. Ho blamed the intrusion of Christian religion in China for the current turmoil. In his view, missionaries made the mistake of targeting for conversion the most uneducated sector of Chinese society, a group strongly attached to their religious beliefs and hostile to Western civilization.[101] Ho deemed the aggressive missionary enterprise counterproductive, since it resulted in a frenzied horde of daring Chinese bent on a holy and suicidal crusade. Fueling the aggression were notions about supernatural Westerners who brought to life harmful humans cut from paper figures, poisoned village wells, introduced illness, and procured Chinese eyes, blood, and female nipples as ingredients for medicines.[102] The consul expressed hopes for peace and a satisfactory settlement of the conflict: "We who have had the opportunity of coming into contact with Americans and Europeans, deplore the present troubles and desire friendship."[103] There were concerns that a victory of the foreign powers, the Eight Nation Alliance that included the United States, would lead to a drastic revision of the Burlingame Treaty and thus expose the Chinese in America to intensified discrimination and persecution. "How come my motherland falls into such a tragic situation," mourned one *Chinese Western Daily* reporter.[104]

A week later, Ho sought to further downplay rumors about an attack on Chinatown, observing that, in his opinion, the events in China failed to nurture

additional anti-Chinese behavior among San Francisco health officials. Perhaps "sand-lot" agitators would attempt to provoke such an assault, the consul reckoned, but they would not attract a very large following.[105] Wu Tingfang, for his part, tried to squelch another rumor that many Chinatown residents were returning to China and joining the rebellion. The Chinese minister stressed that most Chinese living in America came from southern China and were unsympathetic to the Boxers' cause; they did not even speak the same language. The diplomats went to great lengths to reassure San Franciscans that Cantonese migrants were entirely satisfied with their conditions in the United States. However, to counter any possible attacks against them, the U.S. government was asked to use all necessary resources, including federal troops, to protect the safety of all Chinese people living in this country.[106] For an American public ignorant of regional Chinese differences, Ho desperately tried to put more distance between the vile Boxers and Chinatown residents by painting the former as Tartars who not only persecuted foreigners but also victimized the Cantonese. According to reports, the Boxers indiscriminately murdered all Cantonese people in Beijing. Some Chinatown residents, wishing revenge, even offered to serve in an American regiment bound for China to fight the despicable rebels.[107]

Following a meeting on July 19 between Ho Yow, the presidents of all Chinatown associations, and about two hundred Chinese merchants, the participants approved a resolution expressing profound sympathy for all foreigners currently under siege by the Boxers. The Ning Yung Benevolent Association issued its own communiqué, voicing the hope that Western armies would restore peace and seize the criminals. For its part, the Sze Yup Association emphasized that its members detested the Boxers and their sympathizers. Both organizations sent their proclamations to the Chinese minister in Washington for transmission to the U.S. secretary of state, with copies to the San Francisco Chamber of Commerce, Merchants Association, and Board of Trade.[108] These actions sought to ameliorate the growing American hostility toward China and its people, including those who resided in Chinatown. The highly charged climate also precluded Chinatown residents from launching their planned lawsuit against the San Francisco authorities, demanding monetary restitution for the losses caused by previous inspections and quarantines.[109]

Just as the Chinese leadership believed that their damage control concerning the fallout from the Boxer Rebellion was bearing fruit, another internal problem surfaced. As representative of the imperial government of China ruled by the Empress Dowager, Consul Ho was always affected by leadership changes

in Beijing. He and Wu Tingfang considered themselves to be progressives, supporters of Emperor Guangxu and his Hundred Days' Reform, an ephemeral effort to lay the groundwork for modernizing China. But following Wu and Ho's appointments and departure for the United States, their patron had been deposed. The "Iron Hats," a coalition of conservative imperial family members, councilors, and palace advisers, managed to reinstate Cixi, the Empress Dowager, to the throne. Rumors first circulated that Guangxu had been killed, but later news confirmed that he had survived but remained in seclusion while Cixi canceled or ignored many of his reform initiatives. As an official representative of the Chinese government, Ho pretended that the emperor and empress worked together "in perfect harmony," and although Cixi was not well appreciated abroad, she was said to be wise, "ardent for reform," with only China's welfare at heart. Such a statement was, of course, difficult to reconcile with her hands-off policy with regard to the Boxer uprising and her loathing of foreigners. Neither Wu nor Ho could disavow the reactionary government they came to represent; they risked recall and possible execution for treason. The better approach was to work on topics of interest to the regime—trade and immigration—while protecting the Chinese in San Francisco from intrusive public health measures related to the plague outbreak.

By 1900, Chinatown had become a haven for political intrigue that promised to further compromise its allegiance to the diplomatic and mercantile leadership ruling the district. Ho and the Six Companies negotiated with local authorities about sanitary matters related to the plague epidemic. Yet, San Francisco also hosted a branch of the Chinese Empire Reform Association (Bao Huang Hui), guided by Chong Tong Kai, editor and publisher of the *Mong Hing Yat Bo* (*Chinese World*), a small newspaper. The organization, established by Kang Youwei, a scholar from Guangdong province and former adviser to Emperor Guangxu during his brief reform period, was devoted to the emperor's restoration under a constitutional monarchy. Forced to flee the country after the coup that removed his leader from power, Kang—often branded a self-promoting reactionary and fraud—established the association, with branches in many countries. Chong, although born in China, had lived in San Francisco since childhood and gradually achieved prominence in Chinatown as an official of the Six Companies, as well as an English translator for commercial groups and newspapers. As secretary of the reform association, the charismatic Chong ruled over an estimated five thousand members in Chinatown

alone, with additional branches in major West Coast cities such as Los Angeles, Portland, Seattle, and Vancouver. To the chagrin of consular officials, his fiery rhetoric moved the spirits and loosened the wallets of his humble followers.

On July 28, the *San Francisco Chronicle* published an article under the headline "Troubles in the Chinese Colony." Readers were told that another Chinese newspaper, *Oriental and Occidental Press,* had launched a bitter attack on Consul Ho Yow, accusing him of deception and malfeasance. Ho was denounced for coaxing money from merchants ostensibly to pay for fictitious negotiations about deportation issues conducted between the Chinese minister and the secretary of state. Other charges were more serious. They centered on Ho's actions in relation to Chong's leadership of the reform association. The consul had demanded that Chong recant a series of articles and circulars that advocated the reinstatement of Emperor Guangxu or face arrest of his relatives in China. Chong's refusal to publish a retraction triggered a heavy-handed invasion of a small Guangdong village, where, on orders of the empress, four of his relatives were arrested, imprisoned, and tortured. Hundreds of relatives and clansmen were also forced to flee to Hong Kong and Macao.[110]

Ho defended himself, accusing Chong and his reformers of raising funds for a planned military overthrow of the Chinese government, an intention confirmed by his personal detectives and other spies operating under his orders in Chinatown. In fact, two reform members were alleged to have returned to the homeland with enough cash to raise an army of forty thousand men, but the plot was discovered and aborted. Faced with a serious security threat, the consul was merely fulfilling his duties. As the feud became public, Chong hired Samuel M. Shortridge, the lead attorney working for the Six Companies, to pursue the matter of his imprisoned relatives with authorities in Washington, DC. Both parties traded personal insults, with Consul Ho coming out the loser. Those merchants he had fleeced became resentful and hostile. His leadership was said to depend entirely on "pull" from his family connection with Wu. Ho was criticized for neglecting his duties, nursing "disreputable habits," and extorting money. The consulate was painted as a "sinecure" and farce. Ho stopped holding regular business hours, and the building was frequently closed. Most hurtful were allegations that Ho's Chinese language skills and writing were deficient.[111]

By the end of 1900, plague still seemed to hover over Chinatown in spite of vehement disagreements between experts and a marginalized federal quarantine

officer. Western hostility toward China lingered, even after the successful lifting of the Beijing siege and the end of the Boxer Rebellion in August. Finally, Chinatown's prominent local diplomat had lost stature, his authority diminished, his character suspect, deceit and cruelty looming behind a façade of graciousness. For local sanitarians and politicians hoping to work with the Chinese leadership to contain the plague outbreak, the future appeared ever more uncertain.

Plague Goes Underground

1901

> The situation [in San Francisco] is worse than you think. *There is* plague in Sacramento and *probably* in San Diego, Los Angeles, Portland and Seattle . . . I cannot foretell the outcome but I fear disaster. The Service has met or is near to meeting a Waterloo. If you think I am pessimistic, I cannot help it.
>
> —JOSEPH H. WHITE (MARCH 7, 1901)

Expert Opinion: Adventures of a Federal Commission

With demands for Joseph Kinyoun's resignation growing louder in commercial and Republican political circles, the embattled federal quarantine officer requested an outside investigation of his official acts in an effort to clear his reputation.[1] Walter Wyman obliged, and in late December 1900 appointed assistant surgeon Joseph H. White, then in charge of the Marine Hospital Service Domestic Quarantine Division, to conduct an inspection of all Pacific Coast stations.[2] A friend of New York City police commissioner Theodore Roosevelt, White was well known for the tact and administrative skills he displayed during a yellow fever outbreak at the South Atlantic Quarantine Station.[3] His specific mission in San Francisco was to look into the matter of food imports from China and Japan, which Kinyoun continued to block. However, a few days after his arrival in early January 1901, White went to a cellar in Chinatown to inspect the body of another presumed plague victim. A 60-year-old merchant, Chun Way Lung, supposedly suffered from gonorrhea, but an autopsy by Wilfred Kellogg (with Henry Ryfkogel, White, and Kinyoun in attendance)

suggested bubonic plague. Reporting to Wyman, White vouched for the reliability and integrity of Kellogg and Ryfkogel's plague diagnoses, but he expressed fear that Kinyoun's bacteriological confirmations were no longer trusted by local authorities.[4]

The governor of California and his political allies were primarily responsible for creating such a climate of suspicion and deceit. Henry Gage's refusal to acknowledge the presence of plague contradicted the diagnoses verified by competent Pasteurians in San Francisco. Informed of Gage's obstinacy, a frustrated Kinyoun proposed that independent outside experts settle the matter, a suggestion seconded by White and transmitted to the surgeon general in Washington.[5] Perhaps "testimony from the highest bacteriologist in America" or a commission of prestigious scientists would restore Kinyoun's credibility and allow him to continue investigating cases.[6] Consulted on the matter, William H. Welch, a distinguished professor of pathology at the Johns Hopkins University, proposed several candidates, including Simon Flexner, professor of pathology at the University of Pennsylvania; Harold C. Ernst, first professor of bacteriology at Harvard University; Lewellys F. Barker, professor of anatomy at the University of Chicago; Frederick G. Novy, assistant professor of bacteriology at the University of Michigan; William H. Park, of the New York City Health Department; and others.[7]

Barely a week later, the Treasury secretary wrote to Flexner, Novy, and Barker, appointing them to an official commission of the department "for the purpose of ascertaining the existence or non-existence of bubonic plague in the city of San Francisco, California."[8] Both Flexner and Barker had recently traveled to the Philippines, Hong Kong, and India to study plague outbreaks.[9] After his return from India, Novy visited Berlin to confer with the German Plague Commission. Wyman urged commission members to proceed as soon as possible to San Francisco, contact local authorities, and secure facilities to carry out their work. He also requested progress notes and a final report detailing their findings, a document that "will not be otherwise given out until authorized." "It is the desire of this Bureau that your investigations should be entirely unprejudiced and independent," he stressed.[10] After their arrival in San Francisco on January 26, all three scientists held their first formal meeting at the Occidental Hotel, deciding to contact local and state health authorities and prominent local physicians for their opinions. The commissioners' "open-door policy" would also allow consultations with San Francisco's commercial interests.[11]

Gage's immediate reaction to the news was to send a telegram to President William McKinley requesting that the federal experts cooperate and work

closely with state health authorities,[12] but the recently reelected chief executive answered through the Treasury secretary, declining the state's offer of cooperation. The federal government's position was that this experienced panel should be allowed to work independently. All findings would be communicated to the Treasury Department and forwarded to the governor of California. The letter was not well received in Sacramento; Gage sought to compare the work of the "secret" commission with Kinyoun's inaccurate federal plague reports, which, in the governor's opinion, had imperiled the welfare of every California citizen. Newspaper editorials warned commissioners that their actions would be closely monitored and that bacteriological evidence alone would never convince the public that plague was present.[13] Others urged legislation to control all public health matters within the state to prevent future federal interventions.[14]

Undaunted by the hostility, Flexner, Barker, and Novy held extensive interviews with individuals representing the city's professional and mercantile interests. From the start, they sought to reassure visitors of their impartiality and willingness to meet with all persons claiming to possess information bearing on the subject. Systematic inspection of the sick and dead in Chinatown was scheduled to begin on February 6, supplemented by "special trips" into the area under the guidance of local police. Barker, accompanied by a Chinese interpreter, ventured into the quarter to visit the sick while Novy carried out bacteriological tests. Their initial impression, reflected in the final report, was that the district was overcrowded and "shockingly unsanitary." However, the commissioners also observed that the inhabitants were "much better off than their countrymen in great native centers like Canton and Hong Kong."[15]

As they planned their investigations, the federal experts discovered that, on orders of Governor Gage, University of California president Benjamin I. Wheeler had objected to their presence on the San Francisco campus. There, Alonzo Taylor, professor of pathology at the Medical Department, had offered the commission the temporary use of his well-appointed laboratory.[16] To avoid delays, Mayor Phelan placed a license office in City Hall at the scientists' disposal, hastily outfitted with items purchased locally. Since there was no official mortuary in San Francisco, autopsies would be conducted in the dimly lit alcoves of Chinatown coffin shops or in the rooms where the dead were discovered.

On the positive side, the Chinese leadership seemed to support the commission, issuing a proclamation to residents and urging them to report all suspicious cases. Wong Chung, secretary of the Six Companies, agreed to accompany Lewellys Barker on his daily rounds through Chinatown.[17] His temporary

assignment was to function as an interpreter and facilitator, capable of gathering information on suspicious cases. A 43-year-old Chinese schoolteacher and court translator with excellent English language skills, Wong had come to America in 1887 and lived with his wife and teenage daughter at Waverly Place. His willingness to collaborate with the federal authorities was somewhat suspicious; in June 1900, he had filed an affidavit in support of the grocer Ho Jew in his lawsuit against Kinyoun and the San Francisco Health Board. Moreover, Wong himself had recently brought a bill of complaint into federal court against Kinyoun, demanding the release of cargo from a quarantined ship. Given his prominence in Chinatown, Wong seemed the ideal double agent, keen to follow the movements of federal and local health officials while also disclosing sites of illness and urging commissioners to be respectful of private Chinese space.

The first inspected case, Chu Ah Chon, was a 44-year-old actor who died during the morning of February 5 in a room above the Washington Street Theater. That same day, Dr. Kellogg conducted an inspection of the body in the presence of the federal commissioners. Chu's legs displayed a number of bluish, hemorrhagic spots typical of plague. On palpation of the neck, armpits, and groin, some swelling was also detected. Given the findings, Barker suggested removal of samples from the enlarged spleen and lymph nodes for pathological and bacteriological examinations. This material was then injected into guinea pigs.[18] In their final report, the commissioners noted the difficulty in obtaining permission from the Chinese to conduct autopsies and remove tissue for bacteriological examinations because of opposition to all bodily mutilation. Consent was obtained only after assurances that the examinations would be limited strictly to the minimum needs for establishing a diagnosis.[19]

With Wong Chung's assistance, several sick Chinese previously reported to the Six Companies were brought to Barker's attention. By February 12, the team had witnessed and studied six cases that not only displayed clinical characteristics and postmortem signs of plague but were properly verified by pathological and bacteriological findings. They ranged from a 45-year-old cigar maker, Wong Chi Lui, to a 51-year-old actor, Tom Shon, who lived in the same Washington Theater as Chu Ah Chon. Chinese physicians had treated some of these patients before their deaths; their buboes appeared anointed with an assortment of salves.[20]

Two poignant examples of the commission members' cultural sensitivity—possibly on advice from Wong—were the cases of Chung Moon Woo Shea, a woman living in a cellar at Waverly Place, and Fong Ah Fong, a 12-year-old girl. Barker managed to see both patients before their deaths. Suspecting plague,

Barker requested permission to examine Chung's body the next morning, but by then the house had filled with men, women, and children, all friends of the deceased. The same occurred in Fong's case. Everybody strenuously objected to any kind of dissection, forcing Barker to promise that he would only perform a small cut in the groin. "Amid an appalling outbreak of grief," the incision was allowed, disclosing in Chung's case no swelling or hemorrhages typical of the bubonic scourge. However, the young girl was eventually diagnosed as suffering from bubonic plague through bacteriological cultures. In his official reports, Barker apologized for the finite nature of his pathological inquiry: "In the face of the strong protest made by the friends, it seemed wise not to antagonize the Chinese too much, and so interfere with the progress of the whole investigation."[21] Members of the special commission ended their work in Chinatown on February 16 in the belief that they had investigated enough cases—they had examined thirteen dead—to arrive at a firm conclusion. Amazingly, it took the commission less than one week to detect six cases of plague in Chinatown, with much of the credit going to the commission's interpreter, Wong Chung. All of them were thoroughly studied and the diagnoses confirmed by extensive bacteriological testing. By comparison, the local health authorities had managed to find only twenty cases in ten months during 1900.

On that same day, Flexner, Barker, and Novy finally were able to meet with the governor of California. The scientists informed Gage of their mandate and shared their findings. The Western rancher and glib politician later recalled the scene: a trio of somber men entering the room as in a funeral home, telling him that they had very sad news to report. Gage was furious and later railed against commission members. He accused them, as he did Kellogg, of failing to employ the necessary precautions in handling supposedly deadly plague materials. None of them bothered to change their clothing when returning to the Palace Hotel for meals, he charged.[22] Like the local press before him, the governor appealed to concerns and phobias concerning bacteria, painting the irresponsible germ hunters as threats to public health.

Faced with the news of plague in Chinatown, Gage remained adamant. In the following weeks, he waged an intense campaign designed to question the diagnoses and prevent publication of the final report. In a telegram to President McKinley, he complained again about the state's exclusion from the federal probe, calling the willful omission "unfair" and "unjust," while demanding another joint investigation with federal and state experts.[23] He also accused the commissioners of being biased, influenced by his archenemy, Kinyoun. The measured

response from Washington via the Treasury Department attempted to reassure the governor, telling him that matters could be sorted out; the report was confidential and would not immediately be made public to avoid negative publicity and commercial disturbances. Gage was asked to send a special representative to the capital for further consultations.[24]

As the federal commission wrapped up its work and prepared its final report on February 26, Wyman tried to suppress news, already circulating among academics, about the presence of plague in San Francisco. He feared that reporters for the wire services would pick up the university gossip and disseminate the information across the nation before the federal authorities had a chance to "bring the Governor around to work with us."[25] In a secret conference with Gage, managers of leading San Francisco newspapers, attorneys for the Southern Pacific Railway, and the president of the Pacific Mail Steamship Company, all agreed not to publish reports from any expert, even those released by the government. In view of the recent findings, Gage also suggested that the federal government assume all further cleanup responsibilities in San Francisco as part of California's traditional reliance on government funds in the form of land grants and subsidies for infrastructure projects. However, the Treasury Department denied his request; under current laws, the city of San Francisco was responsible for such costs. Both California senators agreed with this ruling, urging Gage to engage in "friendly cooperation" with federal authorities.[26]

Unable to travel to Washington because of legislative business in Sacramento, the governor assembled a group of "distinguished citizens" to "consult and advise" with the Treasury secretary. They were John P. Young from the *San Francisco Chronicle;* Fremont Older from the *San Francisco Bulletin;* Thomas T. Williams from the *San Francisco Examiner;* William Herrin, chief council for the Southern Pacific Railroad; and Henry T. Scott, president of the Union Iron Works and a personal friend of President McKinley. Young also represented Mayor Phelan and local business interests. The quintet's mission was to intercede with the president and Treasury secretary to permanently suppress publication of the federal commission's report.[27]

At a tense meeting in the capital, the Treasury secretary, Wyman, and Gage's representatives tried to reach a compromise. The federal authorities agreed not to reveal the commission's findings concerning the presence of plague in San Francisco; in exchange, the California quintet verbally pledged to conduct a sanitary campaign in Chinatown to eliminate all possible conditions responsible for the appearance of plague. Such work would be pursued "quietly, without

publicity," under the guidance of an expert from the Marine Hospital Service. The two senators from California dispatched a telegram to the Governor, informing him about the deal, considered critical for avoiding injury to the state's reputation and economy.[28] In a telegram to Kinyoun, Wyman stressed the harmonious character of the deliberations. "Public exigency" required that personal feelings and scientific verification be subordinated to political priorities until further orders.[29] The Chinese leadership, not privy to the secret compromise, speculated that federal experts disagreed about the existence of plague, failing to reach a final conclusion.

In a confidential letter to state health officials, Wyman admitted that, on his orders, all information about additional plague cases in San Francisco since early January had been deliberately censored, including publication in the official *Public Health Reports*. His reason was to bring about "harmonious action for more sanitary work." The local cleaning campaign would proceed "without undue publicity" and without "exciting unnecessary alarm."[30] Not surprisingly, Wyman's circular caused widespread apprehension and suspicion throughout the country. Pressed by health officials and the governor of Texas, the surgeon general was forced to publish some details of the deaths studied by the federal commissioners. By this time, their final report was already known to hundreds of people and freely discussed among public health experts. Copies were being leaked to medical journals and newspapers.[31] William H. Welch invited one of the commissioners, Novy, to deliver a paper on his work in San Francisco to a meeting of the American Association of Physicians.[32]

In San Francisco, Kinyoun termed Wyman's circular a "surrender," a blow to the prestige of the Marine Hospital Service. Selling out to politicians was humiliating, but it was also "a calamity to the nation," he told a friend.[33] White wrote a personal letter to the surgeon general, complaining that he had been placed in an "untenable" position: he could not talk about plague yet was supposed to supervise a new campaign to prevent it. White was angry, claiming that his professional credibility had been compromised by Wyman's confidential "agreement."[34] The *Evening Bee* greeted readers with the headline "Infamous Compact," claiming that it violated the law.[35] Wyman stoutly defended his decision: "I believe I have accomplished what I set out to do, namely to let the report get out without newspaper flourish."[36]

On April 1, the *Occidental Medical Times* published the full report with a harsh editorial. The motives of the so-called Gage Commission in appealing to the president were deemed "selfish, entirely financial and absolutely degrading."

Once again, business concerns seemed to trump public health. The journal also questioned the integrity of the Treasury Department, party to such an "incomprehensible compact." Most of the blame, however, fell on Wyman. He was accused of violating U.S. laws and breaking international agreements reached at the recent Venice sanitary conference, which required all nations to notify governments around the world about the existence of contagious disease. Wyman's "atrocious alliance" with newspapermen, who willfully suppressed the truth, sacrificed the honor and dignity of his position. It also discredited and insulted the proud officers of the Marine Hospital Service, the San Francisco Health Board, and the special federal commission. Worst of all, the agreement disgraced California in the eyes of the nation and abroad.[37] For the second time in just one year, President McKinley had blinked when confronted by Governor Gage and his political supporters, with deleterious effects for the reputation of American public health.

Persona Non Grata: The Ouster of Kinyoun

After Joseph Kinyoun's aborted federal quarantine in the early summer of 1900 and his near conviction for judicial contempt, the federal quarantine officer became a favorite target of ridicule and vituperation.[38] The *San Francisco Chronicle* routinely portrayed him as one of the "plague fakers" who groveled before Judge Morrow to avoid prison and used his position to feed a grudge against the people in California.[39] Kinyoun continued to send telegrams to health officers of neighboring states, urging them to take precautions because Chinatown was infected.[40] Although local Republican newspapers, mercantile leaders, and state officials repeatedly called for his ousting, Kinyoun defended his actions, denouncing everybody for failing to understand or care for the new federal laws and regulations.[41]

Kinyoun lamented the fact that Wyman declined to visit the West Coast after the initial plague diagnosis in the spring of 1900, remaining instead safely ensconced in Washington, "confined to preformed conclusions." Explaining the California travel ban fiasco, he placed all fault on Wyman and his weak-kneed policies. According to the federal quarantine officer's revised and self-serving version of events, the federal regulations he was asked to implement were actually illegal and unconstitutional, bringing him into conflict with Governor Gage, Judge Morrow, and District Attorney Coombs as well as with Judge McGuire. "I had nothing else to do, however, but to obey my orders, which I did to

the best of my ability," he wrote.[42] Kinyoun was bitter; Wyman failed to take responsibility for his actions and exonerate him. He claimed to have been loyal to Wyman for the past fifteen years: "fought hard his battles, shielded him from his mistakes and saving the Surgeon General's political head 'from rolling into the basket.'"[43]

The relentless media campaign to discredit Kinyoun received a boost in September 1900 after some passengers on a ship temporarily detained at Angel Island complained about their treatment. The steamer *Coptic* had arrived in San Francisco from Hong Kong with its ship surgeon reporting a mild case of typhoid fever on board as well as two sick crewmen with swollen glands. Several cabin travelers characterized the examinations and disinfection procedures as "indecent" and "humiliating." Following the episode, the *San Francisco Chronicle*—under the headline "Has Kinyoun Gone Mad?"—expressed anxiety that the federal quarantine officer "will drive a vast amount of business away from this port if allowed to continue unchecked."[44] There were calls for a public petition demanding his removal, even though Kinyoun had been away on an inspection tour in the Pacific Northwest and not involved in the *Coptic*'s detention.[45] Both the San Francisco Chamber of Commerce and the Merchants Association created a committee to investigate the incident, intending to file a complaint with the surgeon general.[46] By mid-December, the chamber passed resolutions charging Kinyoun with brutality and indecency toward the passengers temporarily detained at the quarantine station and accusing him of issuing false reports about the existence of bubonic plague. This document was forwarded to California's congressional delegation in Washington for further action.

Local newspapers reacted angrily to the detailed autopsy findings and bacteriological studies from official plague deaths conducted at the Angel Island laboratory. They continued to be published in the national journal *Public Health Reports*, advertising San Francisco all over the world as a "plague center."[47] The information harmed commerce and tourism.[48] The *Chronicle* even charged Wyman, as editor of the journal, with "malfeasance in office" and called for a congressional investigation and his dismissal.[49] Matters only got worse before Christmas. A U.S. marshal notified Kinyoun that a bill of complaint had been filed in federal court against him and the Occidental and Oriental Steamship Company. John E. Bennett, attorney for the Six Companies, had repeatedly demanded a complete release of the *Coptic*'s cargo, threatening legal action. Kinyoun insisted that parts of the cargo needed first to comply with federal quarantine laws. He believed, probably correctly, that the steamship company was

actually "in connivance" with the Chinese leadership in bringing this lawsuit. Chinatown merchants felt that Kinyoun's quarantine measures had adversely affected the business and residents of Chinatown, and everybody looked forward to his dismissal.[50] Rumors circulated that Kinyoun and a customs inspector had conspired over the unloading of cargo from China. The case was scheduled for a hearing by Judge Morrow in early January 1901.[51]

In his first biennial address to the California legislature, on January 8, 1901, Governor Gage directly referred to Kinyoun's actions.[52] Without mentioning the federal quarantine officer by name, he accused "some investigator" of accidentally substituting imported plague bacilli on slides and cultures for "innocent" ones. To avoid reckless and criminal future contaminations, the governor proposed legislation to make the importation of plague bacilli into California a felony punishable with life imprisonment. Similar sentences awaited scientists who developed such cultures with materials obtained from plague suspects and inoculated animals without supervision by the California State Health Board and personal approval from the governor.[53] Deceptions and false reports of plague had damaged the state's reputation.

Not surprisingly, Kinyoun reacted strongly to these allegations. In a message to Wyman, he referred to the outlandish charge of importing the plague bacillus from India and inoculating a dead Chinese with this material to create a local plague scare. How could such a high official stoop so low? "His statements were more in keeping with what is found in yellow-backed dime novels," Kinyoun protested. He was surprised that "such a vicious state of mentality could be found in any place except California."[54] Worried that the governor's "kindergarten legislature" would enact some laws designed to curtail the work of bacteriologists in the Golden State, Kinyoun secretly traveled to Sacramento by the end of January. Staying under an assumed name, he conferred with Gage's political opponents.[55] Nevertheless, by an overwhelming majority, the state senate passed a resolution requesting that the president of the United States remove Kinyoun from his San Francisco post. A few days later, however, with some legislators objecting to the original resolution, Gage was forced to compromise and support a substitute resolution that declared Kinyoun "*persona non grata* to the people of this state." Another bill, introduced by Senator Cutter, asked Congress to order the removal of Dr. Kinyoun; it was buried in the Assembly Committee on Federal Relations.[56]

Not long after, in early March, the U.S. Congress approved an amendment to the 1893 Quarantine Act granting additional powers to the Marine Hospital

Service. Any local or state quarantine officials who trespassed on federal quarantine grounds and anchorages or interfered with the service's functions would be arrested and charged with a misdemeanor. Similar charges could be brought against masters or owners of vessels violating the provisions of the Quarantine Act, especially concerning inspections and disinfection. Ships coming to U.S. ports without a bill of health would be automatically quarantined and the cost of such measures charged to their owners.[57] Although not inspired by Kinyoun's case, this legislation legally strengthened the embattled federal quarantine officer's position in San Francisco.

Unfortunately, the law only prompted further actions against Kinyoun. The final blow came in March, courtesy of John P. Young, editor of the *San Francisco Chronicle.* Before leaving San Francisco with other members of Governor Gage's handpicked delegation to confer with federal officials about the findings of the federal commission, Young promised reporters to return with "Kinyoun's scalp dangling from his belt."[58] Indeed, on April 6, shortly after Young's return from Washington, Kinyoun received "without any explanation" his orders from surgeon general Wyman for a routine transfer to Detroit. "The politicians were successful in having me removed," Kinyoun later admitted, claiming, "It is very evident that I have been made the scapegoat for the second time in order to extricate Dr. Wyman from an impossible position."[59]

Ten days later, by invitation, Kinyoun appeared before members of the California Medical Society, gathered for their annual meeting in Sacramento. Instead of providing an informal introduction to a discussion of four papers, Kinyoun launched into his swan song: a lengthy dissertation on bubonic plague, coupled with a review of his activities. His prediction was that so long as California residents and commercial enterprises remained substantially unaffected, little attention would be paid to plague among the Chinese. Moreover, the state's "machine politics" wished to remain in control and retain the status quo. Physicians like him who discovered a dreaded disease and publicized its existence should be prepared for "every species of abuse known to man." The public would be told that there was a "traitor in the camp with hellish designs on ruining the state." After extensive discussions, the society voted to support a future antiplague campaign.[60]

Chinatown merchants were delighted with the departure of the leading "wolf doctor." No longer honored after leaving his important post, Kinyoun was "like a dragon being duped by shrimps when swimming in shallow water."[61] Lawyers, successful injunctions, and contempt procedures had kept the vicious

predator at bay. Even some of his laboratory animals inoculated with plague bacilli had survived, to the consternation of scientists and politicians, reported the *Chinese Western Daily*.[62] Gage also celebrated Kinyoun's exit; his parting shot was to once more accuse the federal quarantine officer of having "innocently or otherwise" inoculated plague bacilli into Chinese corpses.

Kinyoun, in turn, observed that the governor and his "immortal five" sycophants sent to Washington had cut a deal about the health of California without any input from physicians. The medical profession had become discredited, replaced by a new "regime of politico-medico eclecticism." The commercial sector and legal profession have taken over, lamented Kinyoun, and they will discipline and suppress practitioners who dare to act against their interests. With dramatic flair, he repeated some of the words from the resolution authored by Senator Cutler, characterizing him as "a sword of Democles" hanging over the heads of California residents. After returning from Sacramento, Kinyoun learned that John P. Young had demanded that the Marine Hospital Service ban the disgraced officer from appearing at the state medical society meeting, a request interpreted by Kinyoun as further proof of the "understanding" negotiated in Washington between the Gage commission and Surgeon General Wyman.[63] In a battle of strong personalities, the ruler of California had prevailed over the master of Angel Island.

Months before his departure, Kinyoun tried to summarize his activities in San Francisco in a letter to a colleague. The document provides a unique, albeit subjective, window into the tribulations of a distinguished American medical scientist, proud of his numerous accomplishments and publications, most happy working in his laboratory with specimens and cultures. Kinyoun blamed a jealous Wyman for his plan to "simply relegate me to oblivion." Such resentment seemingly led to the initial San Francisco transfer, intended to separate Kinyoun from his investigative work and thus end his scientific career. Kinyoun found the solitude of Angel Island bewildering and demeaning. The stress took its toll; he admitted suffering four "breakdowns" with symptoms resembling "chronic" appendicitis.[64] Placed into an environment where defiance, deception, and duplicity were rampant—no ship arrivals wished to be inspected and detained in a quarantine station—his modest social skills proved insufficient to the task. Admitting to self-righteousness and a "resistant nature," the federal quarantine officer came across as arrogant and dogmatic, perceived as a typical government representative wielding illegitimate powers and resources that were the envy of local and state officials.[65] Kinyoun possessed enough insight to admit

that the California experience had allowed him to "learn so much of the character and human nature which I was deficient in."[66] His impressions of the Golden State and San Francisco joined a chorus of voices decrying life in the last American frontier and its fading gold fever. "I believe that there is less honor, integrity, morality and straight forwardness of purpose in California than exists in any state in the U.S. . . . The one idea and aim of the people of California appears to be centered in that of making money."[67] For him, San Francisco's commercial interests seemed indifferent to health and the preservation of life.[68] He even impugned their leaders' patriotism and national responsibility. Harsh words, spoken by a disappointed and bitter official often bewildered and hurt by the fact that his expertise and the new miracles of medical science were not eagerly embraced by the public and its elected leaders.

Odd Bedfellows: The Federal, State, and City Cleanup

In his biennial address to the California legislature, on January 8, Governor Gage attempted to revive the state quarantine authority. It was time, he argued, to empower state health board members—all loyal to him and his views—and allow these men to exercise control over local health units, including the handling of plague cases. As the new San Francisco charter insulated the city's health board from direct control by a state quarantine officer, Gage recommended passage of a law repealing the charter act and asked for an additional appropriation to pay for a quarantine officer's salary and expenses.[69] In addition, he wanted a law to prevent the landing of ships "at any of the state, city and county, town bulkheads or breakwaters" unless the vessel obtained a health certificate. He also requested a $100,000 appropriation for the state health board, including the "establishment of a laboratory for bacteriological and experimental purposes." California would create a strict system of case reporting, investigation, and verification to protect the state from baseless rumors concerning the presence of diseases such as plague.[70]

By the end of the month, state legislators from both chambers came together around three separate bills embodying most of the governor's wishes. In addition to the appropriation, the state health board would receive authority to handle cases of bubonic plague and Asiatic cholera, placing the reporting of cases in the hands of local health authorities.[71] A final bill, reflecting the governor's hostility toward the federal quarantine officer, was meant to punish careless experiments with bacilli and the publication of irresponsible reports of plague

with prison terms from one to ten years and fines of $500 to $5,000.[72] Before advancing the bills, legislators contacted key commercial and transportation organizations in San Francisco for their opinions. Not surprisingly, there was nearly unanimous local opposition to the reintroduction of a state quarantine officer—notwithstanding the current displeasure with Kinyoun—particularly since the federal government was spending nearly $50,000 a year of taxpayers' money on the Angel Island facility. No one wished to return to the previous dual system that had caused much friction and many unnecessary expenses.[73] Mayor Phelan agreed with the Merchants Association, Board of Trade, and other groups, claiming that Gage's bills were in conflict with the city's new charter.[74] San Francisco Health Board president John Williamson testified against a bill prohibiting the importation of bacteriological cultures.[75] After further debates in Sacramento, Gage's "pet measure"—the $100,000 fund for the protection of California's health—surprisingly passed, despite arguments that the money was not needed since plague simply did not exist in California. Also approved was legislation making it a felony to handle cultures of disease germs carelessly or transmit them with intent to communicate disease.[76]

The March 9 "understanding" about suppressing the federal commission's report envisioned a "hearty cooperation of city and state authorities" in dealing with preventive measures against the introduction of plague. Without acknowledging the presence of the disease, California and San Francisco planned a joint program of inspection, isolation, and disinfection in Chinatown based on previous interventions against smallpox. Joseph H. White would be in charge, with assistance from assistant surgeons Rupert Blue, H. B. Parker, M. J. White, W. C. Billings, G. M. Corput, and D. H. Currie. In addition, the Marine Hospital Service would furnish two bacteriologists, acting assistant surgeons J. M. Flint and H. A. L. Ryfkogel, together with a corps of interpreters, disinfectors, and physicians to be appointed by the city authorities.[77] The work would be done without any publicity—no newspaper headlines—and with the least disturbance to commerce.

The so-called Calcutta plan—named after the Indian city that pioneered such wholesale cleaning—promised to be effective. It included a general disinfection of Chinatown, daily inspection of persons reported sick or dead, removal of suspicious cases to an isolation facility, and transport of the deceased to a morgue for possible autopsies. Dead residents diagnosed with plague were to be placed in hermetically sealed coffins filled with quicklime, with all people who had been in contact with them taken to a detention center for a two-week observation period. As before, a call went out to Chinatown property owners urging them to

put their properties in sanitary condition. Failure to comply would trigger inspections and, for buildings deemed unfit for human habitation, condemnation and razing.[78] Who would pay for the work in Chinatown? After meeting with Mayor Phelan, Governor Gage offered $25,000 from the recently established emergency fund toward the cleanup if the money was matched by the city.[79] Phelan, however, indicated that San Francisco lacked the necessary resources, although the supervisors finally came up with a $6,000 emergency appropriation to hire inspectors. With the state bearing most of the financial burden, a committee composed of San Francisco Health Board president Williamson, state health board secretary William P. Mathews, and the Marine Hospital Service's Joseph H. White would oversee a "systematic crusade against filth"—no mention of the word *plague*. However, White called it a "plan for the eradication of plague," while Governor Gage portrayed the campaign as a civic improvement project demanded by the citizens of San Francisco. Such rhetorical differences reflected profound disagreement about the rationale and objectives of the plan.[80]

Since the State of California was footing the majority of the bill, state health board member Winslow Anderson and his minions reserved the right to perform the work on their terms and only as long as they considered it necessary. They also insisted that San Francisco provide a morgue, hospital, detention center, and facility for burning garbage in Chinatown.[81] The proposed medical facilities consisted of three small, separate establishments, with a morgue and crematorium located on the north side of Pacific Street, between Stockton and Dupont Streets. In addition, the Tung Wah Dispensary would be converted into a detention center staffed by Western physicians. The lazaretto would feature a treatment room for outpatients suffering from infectious diseases and an adjacent chamber to perform autopsies. Additional facilities would be made available to conduct bacteriological examinations and store equipment and materials for fumigations.[82] Just as the cleanup was about to begin, the San Francisco auditor officially refused to sign off on the promised city appropriations, in effect canceling all local contributions to the campaign.[83]

Even more worrisome to local and federal officials was the composition of the state health board team charged with performing the sanitary work under White's direction. William M. Lawlor, the former San Francisco health officer whom Mayor Phelan replaced during the implementation of the new charter, would supervise two inspectors: Elmer E. Stone and August C. Bothe. Lawlor still deeply resented his dismissal; he had challenged it in court but eventually lost following a state supreme court ruling. He also resented federal quarantine officers,

accusing them of being too lax in their screening duties on Angel Island. Thanks to Governor Gage, he was in charge of the Home for the Feeble Minded in nearby Glen Ellen, and he also served as an agent for the San Francisco Merchants Association, paid to monitor the plague situation.

Following the city's default on the finances for the campaign, the Marine Hospital Service rented a building at the edge of Chinatown, outfitting it with a laboratory and morgue. The Tung Wah Infirmary was secured for the admission of potential plague cases.[84] When this scheme was submitted for approval to Chew Wo, the new secretary of the Chinese Six Companies, he was reportedly shocked, "not fully understanding" the need for such institutions.[85] To obtain greater cooperation from the Chinese leadership, President McKinley's friend Henry T. Scott was dispatched to Chinatown to explain the low profile and less intrusive nature of the forthcoming campaign as well as the need for reporting sick and dead residents.[86]

Three weeks into the sanitary operation, White began to suspect that the state health board was ready to end its participation. Governor Gage's people insisted that nothing had been found resembling plague. Efforts to fumigate houses in Chinatown had only been partially implemented. Instead of searching for new plague cases, inspector Bothe was eagerly requesting autopsy notes in an effort to challenge previous plague diagnoses. In this atmosphere of distrust and duplicity, White admitted that he had trouble controlling his temper, particularly when Matthews, the secretary of the state board, intimated that all health officials—federals included—were just political appointees, like puppets "pulled" by their masters. Calling Matthews privately a "miserable old blatherskite," White admitted that the service was at a disadvantage since public opinion remained on the side of local and state leaders who firmly denied the presence of plague.[87]

As the "campaign" entered its final stage in June, the results were disappointing. Many Chinatown houses were never searched. The focus centered on "filthy" buildings previously occupied by residents officially diagnosed as suffering from plague. Once more, the disinfection consisted of twenty-four-hour fumigations with sulfur dioxide used throughout the potentially infected premises. Workers washed and scraped walls, soaked and scrubbed floors with lye solutions and water, and sprayed drapes and other articles with bichloride of mercury, or simply burned them.[88] Inevitably, as before, such treatments caused much damage; water leaked through floors, textiles were destroyed, and valuable articles were mistakenly taken to the crematory, stirring more Chinese

opposition and evasion.[89] Operators claimed to have extracted an average of two cartloads of filth and garbage from each large building.[90] Although removal of the refuse compromised rat food sources, the measures as a whole failed to address their presence in Chinatown.

By mid-June, Governor Gage was congratulating himself, declaring that because of his sponsorship of "thorough and extraordinary investigations," California was now well.[91] He was hailed as "the people's friend" and even received congratulations from Surgeon General Wyman in a telegram on June 18. Joseph White's assistant, Rupert Blue, who took charge of the Marine Hospital Service operations after White's return to Washington that month, made a final report on the disinfection of Chinatown between April 8 and June 21. With an estimated population of 14,500 people, 1,180 houses and 12,736 rooms were supposedly "disinfected."[92] The statistics warmed the hearts of bureaucrats, but the reality was far less impressive. Most of the cleansed premises housed "the better class of Chinese," individuals already persuaded as to the advantages of sanitation because of their desire to stay in business. Given the modest expenditures in disinfectants and labor, Gage's "campaign" was a thrifty and perfunctory exercise designed solely to comply with the March compromise and to solidify the claim that there was no plague in California. San Francisco had already given up. In its annual report, the city health board concluded that "Chinatown cannot be rendered sanitary except by total obliteration."[93]

Governor Gage's special health commissioners published a separate account of their activities together with a lengthy appendix listing all correspondence and telegrams exchanged with government officials. The detailed document, printed at state expense, was another attempt to match, and even neutralize, the federal commission's plague findings. Addressed to the governor, the report lauded Gage for his steps to "wholly disprove the allegation that bubonic plague had existed in San Francisco." In their narrative, Governor Gage's commission had agreed with federal authorities on a very effective plan of action, ridding Chinatown of "vermin" and disease. The public readily accepted the storyline that the state board of health was solely responsible for the successful "work of purification." Federal contributions and leadership were minimized or ignored. Surgeon General Wyman's telegram of "mutual congratulation" was extensively quoted and cited as testimony to the successful cleanup. "Every dollar expended for disinfection and labor was paid for from funds of the State of California."[94]

Hide and Seek: Tracking Sick and Dead Chinese Residents

While politicians from Sacramento to Washington, DC, argued over the existence of plague in San Francisco, more Chinese deaths were reported. Local newspapers remained silent; only "one solitary sheet," the Sacramento *Evening Bee,* dared to mention the fatalities. In San Francisco, such news was received with ridicule rather than apprehension.[95] The departing Kinyoun was not surprised by the steady trickle of new cases instead of a massive die-off. This pattern was similar to outbreaks in other cities across the globe. Here again, the federal quarantine officer blamed his superior, Wyman, for confusing the public through his 1900 monograph on plague. In Kinyoun's opinion, much of the material contained in that pamphlet was at variance with actual conditions described in various Asian localities.[96] Kinyoun accepted the notion that rats were the "chief agent" in the spread of plague and that humans only became secondary targets, a fact already pointed out by Shibasuburu Kitasato from his experiences in Kobe and Osaka. Rats possessed greater opportunities for coming into contact with infected material. Evidence also pointed toward intermediaries, especially insects such as fleas, mosquitoes, flies, and ants, as responsible for spreading the disease. Some experts were aware of French bacteriologist Paul-Louis Simond's 1898 work on the role of fleas infecting rodents and humans by depositing the deadly germs directly into the bloodstream.[97] Human-to-human transmission by contact was also possible, rendering the quarantine of an entire district useless and actually dangerous for those living near plague victims. Only selected Chinatown dwellings hosting victims of the disease needed to be isolated, with surviving residents removed to temporary detention camps for observation and inoculation with ample doses of the curative Yersin serum.[98]

Such targeted approaches based on the latest findings required more accurate intelligence about sickness in Chinatown, especially the precise location and condition of afflicted patients. So far, the behavior of plague pointed to some central foci of infection, perhaps gambling dens or similar places unknown to sanitary officials. But the task of detecting human plague seemed nearly hopeless given the distrust prevailing among ordinary Chinese residents and their tendency to hide or flee. Moreover, health officials quickly discovered that the Chinese leadership, although willing to cooperate, seemed to have limited control over most working people because of the deep social, economic, and political divisions affecting Chinatown. The federal commission's experience during February 1901 pointed to a way out of this dilemma. The key to their success had

Hiding the sick and dead in Chinatown.
San Francisco Examiner, May 25, 1900.

been the cooperation of Wong Chung, the ideal insider, who picked up gossip and reports flowing into the offices of the Six Companies. While Wong's true motivation remained a mystery, the effects of his assistance were striking. After the federal commission's departure, no further cases of plague were detected in Chinatown for nearly two months.

Another concern, already raised by the Flexner commission and followed up by Wyman, was the potential importation of plague into Chinatown from other coastal towns hosting Chinese populations. The district was not only a recreational magnet for the Bay Area Chinese; it also served as an ultimate destination for the ill and dying. The death of a 59-year-old Chinese laundryman, Leung Tun Gee, from plague in early April confirmed Wyman's apprehensions; he apparently had arrived sick from Santa Barbara four days earlier. The surgeon

general sent a letter to health authorities in principal cities on the Pacific Coast, from Seattle to San Diego, offering to examine all Chinese deaths for a month, followed by autopsies and bacteriological examinations of suspicious cases.[99] This federal action was dubbed a precautionary screening, but it drew an immediate rebuke from the governor. In an effort to improve the chances of finding new plague cases and end the squabbles with Western practitioners working in Chinatown who issued their own death certificates, the Marine Hospital Service had reached an agreement with the San Francisco Health Board in April. Federal officers obtained the exclusive right to issue "freedom from plague" death certificates for all defunct Chinese before the city would issue burial permits.[100] To implement this rule, the service relied on its own morgue and laboratory in San Francisco instead of depending on the Angel Island facilities managed by the widely shunned Kinyoun.

When Governor Gage agreed to finance the sanitation campaign, Winslow Anderson had insisted that state health board members be given access to all future autopsies. Under the agreement, state inspectors Lawlor, Stone, and Bothe were entitled to obtain their own pathological specimens for independent studies conducted by Silas Mouser, their expert bacteriologist. Stone was an emergency surgeon working for the South Pacific Railway who also advised the Chinese Six Companies. Bothe was a recent medical graduate from the San Francisco College of Physicians and Surgeons and thus was linked to Anderson, its dean. Joseph White dismissed him as "an embryo bacteriologist" without much professional experience and, in a confidential letter to Wyman, considered the trio "utterly useless."[101]

As in 1900, Chinatown's mortality plummeted to zero for eleven days when the joint sanitation campaign gathered momentum in late April.[102] "How many Chinamen have died from plague and how many corpses of victims from this disease awaited shipment to China no white man will ever know," commented Kinyoun.[103] Inept state sanitary officers kept missing artfully hidden trap doors leading to underground cellars. White had already contacted Chew Wo, who had replaced Wong Chung as Secretary of the Six Companies, demanding assistance and fair reporting. He roughly calculated that there were currently nearly 150 sick individuals in the quarter who needed to be screened for plague.[104] White began to suspect that the state health board inspectors, simultaneously employed by the Chinese Six Companies, were "helping the Chinese select the cases we ought not to see" to ensure that no plague cases would be found.[105] If the authorities discovered fewer plague victims, the state

health board would quickly end its sanitation campaign and declare victory. In the end, it was obvious to everyone that most Chinatown residents, since the first reported death of Wong Chut King, were deliberately not reporting their dead for fear of more home invasions, destruction of belongings, and potential removal.

In early May, Joseph White sought permission from the Six Companies to rehire Wong Chung as guide and interpreter for the service since his replacement, Chew Wo, had quickly delegated this responsibility to others who apparently were less eager to collaborate. Although Wong himself seemed willing, the request was declined, a sign that the Chinese leadership wished to avoid a repeat of his success in tracking down sick people.[106] Stymied, White decided to work more closely with San Francisco's police chief. During periodic raids into the district to investigate illegal "lottery joints" and gaming parlors,[107] police officers would also secretly search for sick Chinese. White estimated that targeting one Chinatown block housing nearly two thousand people would yield between twenty-five and thirty ill persons. All that arduous sanitary work would be for naught if houses were constantly reinfected. "You cannot form any idea in Washington of the difficulties," he confessed to Wyman.[108] Still unsuccessful, White proposed using special Treasury Department agents and customs collectors familiar with the Chinese. These men would be placed on steamers traveling outside San Francisco, attempting to identify sick people being shuttled back and forth to Oakland and Sacramento.[109] Perhaps Secret Service agents or detectives from the local Pinkerton Agency—Wyman's idea—could provide information about the movements of Chinatown residents. The task appeared nearly hopeless: "The ramifications of a house which has been orientalized are so great and so tortuous as to be utterly beyond the conception of the occidental mind," wrote White.[110] With approval from the Six Companies, two federal physicians, Joseph M. Flint and Mark J. White, were allowed to visit patients previously reported to the Chinese leadership. Flint had been hired after arriving from the University of Chicago to set up a new Anatomy unit at the University of California Medical Department. Assistant Surgeon Mark J. White was a career officer from Florida, assigned to his post in San Francisco a year earlier. Both were told to look for fever cases, but the majority of those reported to the service were suffering from chronic heart and lung diseases.[111]

Before the end of May, Joseph White once more decided to personally call on the presidents of the Chinese Six Companies. He tried to impress on them that the sanitary work and search for further plague victims in Chinatown was

primarily for the benefit of its residents. White pledged to anticipate and correct all potential abuses accompanying such work if reported to him, and he asked again for the services of the ex-secretary, who had temporarily left the city. Following Wong's return, White requested an official proclamation from the Chinese leadership endorsing the appointment, asking Governor Gage and his commission and Consul General Ho Yow and his attorneys for assistance. The Six Companies finally acceded to the appeal, and in late May, with Wyman's approval, Wong Chung was officially hired at a salary of $5 per day, five times the pay of ordinary Chinese workers.[112] His codename became "barometer." Would he be able to measure health conditions in Chinatown?

By June, Joseph White had grown frustrated and tired from his dealings with the California governor and his acolytes and wished to return to Washington. His recommendation for a replacement was Rupert Blue. Thirty-three years old and originally from the Carolinas, Blue had earned a medical degree from the University of Maryland. After joining the service in 1893, he endured a series of assignments from Galveston to Genoa, Italy, dealing with urban sanitation and rat eradication programs, before serving a stint at the Angel Island Quarantine Station from 1895 to 1900.[113] Transferred to Milwaukee, Blue returned to San Francisco in 1901 and worked closely with Joseph White on the joint federal and state disinfection campaign funded by Governor Gage. With his imposing physical presence, the Marine Hospital Service officer had already distinguished himself for his diligence and tact, qualities in short supply in an environment of mutual hostility and double-dealing. After his arrival in San Francisco, Blue persuaded Gage of the need to continue searching Chinatown for possible plague cases, on the condition that the governor's loyal inspectors would share responsibilities in this pursuit and be allowed to attend all autopsies.

The deaths of four Japanese prostitutes under the care of a Japanese practitioner and several Western consultants in early July again strained the relationship between California inspectors and remaining members of the Marine Hospital Service. Lodging at the Yoshiwara House, a brothel catering to higher-class Asian and Western clientele, these Japanese women had increasingly displaced Chinese "hundred-men's wives" working in the district.[114] Although recently disinfected during the state cleanup, this house was now quarantined, a departure from the previous indiscriminate closure of the entire district. All four women—part of a group of seven—apparently had been stricken six days earlier with large, painful buboes inside their thighs. Although autopsies and microscopic studies conducted by Kellogg and Ryfkogel confirmed the preliminary

diagnosis of plague, Lawlor and Stone, inspectors for the state board, strongly disagreed. Bacteriologist Silas Mouser also challenged the findings and sent his no-plague report to the state health board. At this point, even the press started questioning Mouser's bacteriological credentials, especially his repeated statements that he had attended the 1892 outbreak of plague in Calcutta, an obvious fabrication as the city suffered no epidemic outbreaks until 1897.[115] Frustrated, Lawlor and Stone charged city health department officers Kellogg and Ryfkogel with deliberately inoculating the deceased women with plague—the same claim Governor Gage had made before. Blue reacted strongly to the accusation by banning Lawlor and Stone from attending all future autopsies. "We can bear a great deal more for the good of the Service and the cause," promised Blue in a personal letter to Wyman.[116] Only federal officers would be present; others would be allowed solely by invitation.[117] To make matters worse, word reached the Service officers that Lawlor and Stone had threatened Wong Chung, instructing him not to report the first Japanese death because "somebody was going to be killed," a message designed to silence the Chinese interpreter.[118]

The sniping between federal and state officials continued well into the fall. Newspapers reported that among the state's expenditures from the Contagious Diseases Fund were payments, personally approved by Governor Gage, to the local Morse Detective Agency for shadowing microbiologist Ryfkogel and federal officers Flint and Mark White.[119] Ryfkogel called the surveillance a "despicable trick," and the practice was strongly condemned in local medical circles. In ousting Kinyoun and pressuring Wyman to recall Joseph White, Gage had employed similar tactics to manufacture charges of criminal infection. Curiously, the detective tailing Ryfkogel was taken off the trail precisely when the bacteriologist's temporary employment with the Treasury Department ended, another indication of ongoing secret collaborations between Gage and Wyman.[120]

The case of Ng Chan, a 28-year-old lottery assistant and clerk working for the Fook Lung grocery store at 821 Washington Street, further deepened the animosity between contending health officials. Ng lived in the basement of that building, which was partitioned by boxes to allow lodging for about fifteen people sleeping in small bunks. After falling ill, he was taken to the Tung Wah Dispensary on September 11, where attendants reported him to the authorities. Although the hospital had been designated as an institution to receive suspected plague cases from Chinatown since early April, this was the first such admission. Apparently the local health board decided to forgo the segregation of patients suspected of plague in the belief that the Chinese would collaborate and report

their sick more promptly to the authorities.[121] Kellogg and Mark White promptly came to see Ng, who suffered from a high fever, fast pulse, and tender bubo located inside the right thigh. Given these findings, the patient was immediately placed in a separate room. Stone, still working for the state health board and the Chinese Six Companies, was notified; he persuaded a friend of Ng's to oppose the federal officials' attempt to obtain a needle-size tissue sample of the swelling for bacteriological examination. Called in on the case, Matthews, secretary of the state board, declared that the illness was venereal. He then tried to assume charge of the hospital under a new section of California's legal code that allowed the state to establish or lift quarantines. San Francisco health officials demurred, insisting that the hospital was within their jurisdiction. Mark White, for his part, pleaded with the hospital staff not to rely on the "governor's doctors." To complicate matters, interpreter Wong informed him that Ng's friends were preparing his secret removal to a Sacramento River ranch. To prevent the patient's extraction, a local policeman was stationed at the bedside to guard him. After three weeks in the hospital, Matthews finally allowed a diagnostic puncture of Ng's bubo, but by this time the diagnosis could no longer be bacteriologically confirmed.[122] The patient eventually recovered, but the episode set up a new legal hurdle: future Chinese patients, on the advice of attorneys working for the Six Companies, would routinely refuse diagnostic tests, including biopsies, on legal grounds of habeas corpus.[123]

Despite this contentious episode, Mark White and Wong Chung were receiving kudos for their "pleasant and courteous manner" in dealing with Chinese residents on the streets and in their sickrooms. This praise came from the current secretary of the Six Companies, prompting the federal officer to observe that "I do not think the Chinese here are very different from the human race elsewhere. And it is my conviction that if they are dealt with in a certain manner, the ends that sanitarians desire can be far more readily attained, and likewise with the Californians. My opinion is the result of five months of daily association and patient observation."[124] Reluctantly, the San Francisco Health Board followed suit, adopting a somewhat more lenient approach to persons potentially exposed to plague. The purpose: quell Chinese hostility and create a friendlier climate, encouraging residents to show their sick to the health authorities. While buildings housing plague cases were still quarantined, occupants would be allowed to go free instead of being chased and detained by police. According to Blue, they usually departed anyway "like the fleas before the body cools off."[125]

In spite of working quietly and avoiding friction with uncooperative state health officials, a polite and stoic Blue was forced to admit by the end of September that the work of federal officials was being "seriously interfered with" by members of the state health board, particularly Secretary Matthews. Scant courtesy, singular apathy, and constant meddling characterized their behavior. During a visit to the service's laboratory in San Francisco, Matthews even issued a veiled threat to Blue and his assistants, telling them that if they continued to inspect Chinatown and discovered more plague cases, he would take legal action against them for practicing medicine in California without a license.

Despite earlier gestures of cooperation, the Chinese Six Companies failed to keep their promises of promptly notifying health authorities of all suspicious cases of illness in the district. To confuse federal officials, some residents even falsely accused rivals of contracting plague.[126] Chinese leaders now preferred to call state health officials for visits and inspections, trusting in their unwillingness to disclose and share information with their local and federal brethren.[127] Blue believed that his office received only a quarter of all the sick reports flowing into the Six Companies. Even a threat from the San Francisco Health Board, stating that it was unlawful to move sick individuals and their personal belongings from houses infected with plague, failed to improve tracking and reporting of suspected victims. In a final report summarizing the work performed by the service during 1901, Mark White, now in charge after Blue's return to Milwaukee, stressed the opposition to further searches from state health authorities, San Francisco commercial interests, and Chinese leadership. Although no cases had been detected during the cleaning operation conducted by state health inspectors, White insisted that the federal service continue to sponsor sanitary measures, including limited inspections, isolation procedures, and disinfection.[128] Yet, to the delight of Chinatown's leadership, Governor Gage and his health officials sustained the popular notion that plague had never been present in San Francisco. "Only a widespread epidemic, one [people] could recognize for themselves, will change that," concluded Blue.[129]

Rumors and Realities

1902

> If you want more bubonic plague, then let us have the open door on this side of the Pacific and let the hungry hordes come in . . . if you want clean cities, undefiled by contagion, then let us have the re-enactment of the Exclusion Act.
>
> —JOHN M. WILLIAMSON (DECEMBER 1901)

San Francisco Stand-off: Mayor versus Health Board

Following Mayor James Phelan's announcement in the summer of 1901 that he would not seek another term, the Marine Hospital Service team operating in San Francisco anticipated changes in their relationship with local health officials. Phelan's decision came after a bitter two-month strike that pitted the new, antiunion Employers Association against a City Front Federation representing teamsters and waterfront workers. When the mayor tried to arbitrate the dispute, employers refused to cooperate, and working-class voters got the impression that both Phelan and the Democratic Party had betrayed them.[1] The steady and cordial collaboration between federal quarantine officer Joseph Kinyoun and local health board members following the death of Wong Chut King proved to be the anchor for early sanitation work in San Francisco. With Phelan's tacit approval, federal health officials operated freely in Chinatown, instead of remaining confined to the Angel Island Quarantine Station. In spite of the disastrous federal embargo imposed by Kinyoun, the Marine Hospital Service's connection with the much maligned "bubonic board" assumed even

greater importance after the arrival of the federal commission in early 1901. This alliance had led to the discovery, diagnosis, and verification of nearly fifty plague victims with help from city bacteriologist Wilfred Kellogg and health officer Aloysius P. O'Brien.

In a personal letter written to Surgeon General Walter Wyman in September 1901, Rupert Blue reaffirmed the friendly cooperation and professional courtesies between the city health board and the service.[2] As the campaign for mayor intensified by mid-October, Blue wrote confidentially about the political landscape in San Francisco and its potential implications for future operations in the city. Members of the unions affiliated with the American Labor Federation and activists from the Socialist Labor Party had organized the new Union Labor Party under the leadership of Abraham Ruef, a lawyer from the Jewish elite of San Francisco and a former Republican. After writing a platform for the new party, he proposed his old friend, client, and one-time business associate Eugene Schmitz as candidate for mayor. Both were thirty-seven years old and former directors of the Republican Primary League.[3] Schmitz's opponents were Asa Wells, the Republican candidate who would certainly support Governor Gage's no-plague stance, and Democrat Joseph Tobin, who was widely expected to follow Phelan's policies.[4]

Of German and Irish ancestry, Schmitz eventually won a close election. A former violinist, orchestra director, businessman, and union leader, "tall and handsome Gene" proved an excellent communicator; he was charismatic, with a good memory and keen eye for political developments. His theatrical experience gave him a degree of self-confidence and capacity to appear unflappable in the most difficult circumstances.[5] His run for mayor included a racist platform promising renewed Asian exclusion, although his Union Labor Party protected illegal prostitution and gambling, a stance that made him popular in Chinatown.[6] Like other third-party candidates, Schmitz's coattails were insufficient to elect other supervisors from his party—nine Democrats and six Republicans remained—enough to override the mayor's vetoes by a comfortable margin, thus ushering in a period of political turmoil and gridlock. Nevertheless, with Ruef as Schmitz's official "friendly counselor" without salary, the new municipal administration was off to a fast start in what quickly turned into a quite corrupt regime. Uncertainty prevailed among Phelan's health board members; nobody was sure whether they would keep their jobs because of widespread anger about their "bubonic" activities, whipped up by relentless abuse from the press and commercial interests.[7] In his valedictory address before leaving office,

Phelan praised the health board, claiming that because of its vigilance the city "was saved from Oriental infection." He also expressed appreciation for "disinterested experts of the highest standing" from the federal government who had helped the city weather the crisis.[8]

When the mayor-elect announced his choices for commissioners and members of the municipal boards, federal health officials became concerned. Among the selections was James W. Ward, a Republican and homeopathic physician, recruited for a vacancy on the health board, the first time in the history of San Francisco that an "irregular" practitioner achieved representation on the board. Ward was also dean of San Francisco's Hahnemann Medical College and supporter of the no-plague faction. Michael Casey became commissioner for the Board of Public Works and therefore an ex-officio health board member. A well-known leader of the Teamster's Union and president of the City Front Federation, Casey supported Schmitz's new Labor Party.[9] On January 9, 1902, Schmitz, in his inaugural address, issued a veiled threat to all city employees, telling them that anyone could be fired for misconduct. He singled out health officials for generating excessive municipal expenses and exploiting their personal ambitions. The mayor wasted no time in blaming Phelan's appointees for "doing injury" to the local commercial and labor interests, promising to investigate their performance for "foisting upon the world sensational and ill-founded reports about the existence of bubonic plague in our midst."[10] Newspapers quoted the mayor saying that it was in the public interest to conduct an inquiry concerning the board's operations during the "period of terror" that resulted in the quarantine of California.[11] Based on these pronouncements, Mark White, now in charge of the federal plague station, informed Washington that Mayor Schmitz displayed a "distinct disposition to hinder the plague work"—another San Franciscan convinced that plague had never reached the city.[12]

Two weeks later, rumors began to circulate that Schmitz had decided to dismiss all current health board members. The irony of this mayoral action did not escape attention: two years earlier, Phelan had behaved similarly under the terms of the new city charter. This time around, however, the appointed "bubonic" members were expected to remain in their positions for up to four years. Now, as before, incumbents refused to voluntarily surrender their offices and threatened legal action. Like other political appointees, they professed to feel secure in their positions, especially since the California Supreme Court vindicated the authority of the San Francisco Health Board in public health matters. Declaring that health was always closely linked to politics, and "doctors are

rather prone to polemical and political warfare," the ruling upheld decisions made by city health authorities except in rare emergencies in which the whole state may be endangered.[13]

On March 25, Mayor Schmitz officially announced the removal of health board members Williamson, Baum, Buckley, and Lewitt as they believed "without proper foundation" or "justification of fact" that bubonic plague had existed in the city since March 1900. Coplin Stinson, a surgeon for the Pacific Sanitarium, would replace Williamson as temporary president. The other replacements were T. A. Rotanzi, a former supervisor; A. S. Adler, an army surgeon affiliated with Mt. Zion Hospital; and M. E. Van Meter, an Eclectic school physician and surgeon from the California Medical College. Schmitz defended the action "for cause," justified by the "continued injury and injustice" to the people and the commercial and financial interests of San Francisco and California.[14] The mayor explained that for three months he had "carefully examined and investigated all accessible reports and records" and was now "unalterably convinced" that the disease had never existed nor was it present today in the city.[15]

Schmitz insisted that the erroneous conclusions were primarily based on inconclusive and unreliable bacteriological examinations. The mayor claimed that city bacteriologist Kellogg's plague diagnoses were made whenever his activities were not supervised or checked by others. Out of thirteen suspected cases investigated by the health board before April 8, 1901, only six or seven were officially found to be true plague cases. Among 103 cases investigated during the joint city and state sanitary campaign from April 3, 1901 until August 27, 1901, not a single plague victim could be found. In the meantime, the health board continued to publish announcements that caused "untold damage" to the city: they prevented San Francisco and California from luring desirable immigrants and tourists even as they held back industrial development for lack of out-of-state capital.[16] The local press widely praised Schmitz's move, heralding the end of the bubonic plague fraud, "pitching out the fakers, neck and crop."[17]

Support for the move came quickly from the San Francisco Chamber of Commerce, the Board of Trade, and the Southern Pacific Railway.[18] The health board's recent behavior was judged to be "villainous." Failure to share financially the state health officials' task of cleaning up Chinatown during the spring campaign was widely condemned, especially as the Phelan administration had agreed in writing to collaborate. At a critical time, the papers claimed, when the commerce of California was threatened and trade in San Francisco came to a virtual standstill, physicians working for the state health board had proved

conclusively that the deaths in Chinatown were from causes other than plague. Angry because of its failure to prove the existence of the disease, the local board had dispatched letters and reports to medical journals all over the world declaring that the city was infected. Retaining the old board would send the wrong message to every state of the union by indicating that quarantine against San Francisco was still necessary and legitimate.[19]

Representing the dismissed board members, prominent local attorneys Gavin McNab and Garret McEnerny appeared before Judge Carroll Cook in superior court.[20] They wished to restrain Mayor Schmitz, Abe Ruef, James Ward, and all the other appointees from interfering with their clients until the matter could be legally settled. Under the San Francisco charter, all removals were subject to a hearing for legal cause. The dismissed officials argued that they should retain temporarily their positions, and Judge Cook agreed, issuing a sweeping injunction against Schmitz's actions. Cook was severely criticized for his decision and warned that his future reelection would be in jeopardy. The case was assigned to another judge for trial.

The stand-off between the mayor and the health board continued well into spring, when superior court judge M. C. Sloss rendered his decree. According to the city charter, the mayor could not oust any officials without proper legal proceedings.[21] Schmitz responded by filing for a warrant in county court against the board members, claiming that they wrongfully exercised their powers beyond the boundaries of the city charter. The case was assigned again to Judge Cooke with hearings scheduled for June. In midsummer, California's attorney general finally dismissed the ongoing proceedings against the health board, disappointing Abe Ruef, the mayor's attorney, who had strongly encouraged the legal action.[22] Incumbents would remain in their posts until their terms expired at the end of the year. Schmitz's lone appointee, James Ward, never attended a single board meeting, traveling instead to Europe for the ostensible purpose of studying foreign public health services.

In the meantime, the existing health board was virtually nonfunctional. Members—all Democrats—were stymied by inadequate funds and antagonism from the newly elected mayor, his administration, the city's newspapers, and the Republican business community. The board lacked the necessary ordinances and financial appropriations from the Board of Supervisors to detect concealed plague cases or control rats. Modest efforts in Chinatown were confined to the isolation and cleaning of reported cases, issuing death certificates, and arranging special burials for persons believed to have died from plague.[23]

Cleansed pedestrian alley in Chinatown surrounded by ramshackle buildings, ca. early 1900s.
Williamson album (author's collection).

Between July and August, however, a dozen plague cases emerged, including three deaths at the Tung Wah Infirmary. Would Mayor Schmitz change his stance toward the disease and members of the health board?

Prodded by federal quarantine officer Mark White, city health board president John Williamson turned directly to the Board of Supervisors for funding a comprehensive program of inspections, disinfection, street cleaning, and rat extermination.[24] The proposal went to the Health and Hospital Committee, headed by Supervisor Arnold D'Ancona, who was also dean of the University of California Medical Department. Since Schmitz could not attend the first reading of the request, he simply tabled it, a move that led to a showdown between the two men. Schmitz insisted that he would not deal with a health board he no longer recognized; any appropriation approved by the supervisors would prompt his veto. Confronted with irrefutable information about new plague deaths, the mayor demanded the creation of a five-member committee of citizens to consider

the truth of these deteriorating health conditions. A majority of supervisors rejected this proposal. They insisted that whether Schmitz questioned the health board's status was now irrelevant. A representative of the federal government had urged that San Francisco take immediate measures, and if the city refused to approve its plan, the Marine Hospital Service would certainly intervene on its own. A resolution to approve $1,000 passed almost unanimously and a committee of supervisors was ordered to oversee the spending of funds. Fears persisted that Schmitz would veto the appropriation, but the money was finally awarded on September 16.[25] The *Occidental Medical Times,* commenting on the rebuke of the mayor by word and action, characterized it as delivering a "stunning blow" to "this most disgraceful chapter in our political history."[26] Undaunted, the mayor left for Washington, DC, in mid-October. Williamson, still president of the health board, suspected that Schmitz wished to consult with President Roosevelt in an attempt to stop all federal work in his city.[27]

No Plague: "Ostrich" Policies under Fire

While politicians and sanitarians feuded in San Francisco, members of the Marine Hospital Service serving in the city discussed the current spread of bubonic plague, trying to predict where the next infections would occur. Since the death of Wong Chut King, systematic concealment and underreporting in Chinatown had kept officials guessing. Was the district a permanent center of infection, or was it being periodically reinfected from the outside? How many dead Chinese had been secretly placed in dry goods boxes and shipped to Sacramento River ranches for burial? During the past year, four confirmed cases were said to have arrived from Bouldin Island in the San Joaquin Valley; another traveled from Sacramento, and one allegedly came from Berkeley. All the Marine Hospital Service could legally do was continue monitoring the situation through periodic visits and inspections until the infection either ceased or erupted significantly enough to force authorities into more radical measures.[28]

Mark White continued to be worried about the influx of persons, cargo, rats, and insects from other places in California, all potentially infected with plague. In mid-March, he sent Wyman a map of California with the trade routes of coastal steamers and possibly infected towns along the Sacramento and San Joaquin Rivers. The California navigation companies transported people and produce along these waters as far as Stockton and Sacramento, while the Southern Pacific Railway boats carried passengers and mail on that same course.

"Decidedly unsanitary" Chinese settlements and ranches with their own landings were popular stops along the route. White focused on the movement of potentially plague-infected rats, rather than on passengers. After coming ashore, these rodents could infect city wharves and move inland. If this was how the disease was spread, the plague problem would never disappear because of periodic reinfections caused by the active movement of people, cargo, and rats.[29] Accordingly, the federal officer recommended that the San Francisco Health Board require all river vessels docking at the port to keep traps or employ funnels on their moorings. White wondered whether the federal government could force quarantine regulations on inland river vessels or compel them to disinfect suspected boats, set traps, and place rat poison on vessels and landings.

Given the bureaucratic paralysis of the city health board, White contacted William P. Matthews, secretary of the state health board, expressing concern about the likelihood of plague infection in other regions of California. He pointed to the valleys surrounding San Francisco and Oakland as sites for monitoring plague because a growing number of plague cases might have originally contracted the disease outside Chinatown. Unfortunately, the prickly governor of California responded in familiar fashion: state authorities were "now and always have been abundantly able to look after the health conditions of the State without outside interference."[30] He believed that no further action was needed. On May 30, Mark White received a visit from Elmer Stone. The state inspector had been instructed by Gage's so-called Plague Commission, now chaired by *San Francisco Chronicle* editor John P. Young, to find out why the Marine Hospital Service was still conducting sanitary work that "should have stopped long ago" in the city under the previous 1901 arrangements. In the governor's view, the service had forfeited its right to continue searches and autopsies because it ignored Gage's offer for a joint investigative team. White politely suggested that Young contact the surgeon general directly.[31]

Gage and his state health board refused to allow any offers of special sanitary expertise or methods for systematic rat killings. Such actions would imply a tacit admission that plague existed in California, thus further hampering commerce because of additional quarantines.[32] Public opposition also remained strong. Mark White insisted that if plague continued to appear in California, other states of the union would be in constant danger of being infected. California would not only become a menace to other states, but it would also negatively affect interstate and international commerce. "I have to report that plague

cannot be eradicated from California unless the State Health Board institutes the necessary measures," he wrote.[33]

In the midst of this impasse, two new developments would, over time, revitalize the antiplague campaign. On July 1, the Act to Increase the Efficiency and Change the Name of the U.S. Marine Hospital Service went into effect. Henceforth, the organization would be called the Public Health and Marine Hospital Service, and its head, Wyman, would be simply the surgeon general of the United States. He would now be directly involved in setting policy instead of deferring to the Treasury secretary. Most importantly for the current impasse in California, the act provided that "it shall be the duty of the Surgeon General to call a national conference upon the application of not less than five State or Territorial Boards of Health, quarantine authorities or State health officers." Wyman now possessed a potentially powerful tool to convene health officials and issue resolutions with respect to quarantines or other measures across the entire country. In addition, the hygienic laboratory would expand its functions, now separated into four main divisions. Such changes were not purely cosmetic; they reflected the new president Theodore Roosevelt's more aggressive approach toward dealing with threats posed by epidemic disease, especially from abroad.[34]

The second event was Governor Henry Gage's failure to be nominated for another term. Plain incompetence, rampant cronyism, obsession with political matters, and excessive deference to the Southern Pacific Railway machine had fostered enemies. Also, Gage's former law partner and political manager, Daniel Kevane, now budget adviser and secretary of the board of examiners, had mismanaged California's finances, eliminating former surpluses and depleting the general fund. There were also rumors that Gage lost the nomination because of his stubborn policies regarding the presence of plague in San Francisco. Opposition in Republican circles came from Michael de Young and John D. Spreckels in San Francisco, with the *San Francisco Call* publishing a sordid story about Gage receiving free furniture and other articles made by prisoners at San Quentin.[35] By August 27, even William F. Herrin, the notorious political boss from the Southern Pacific, shifted his allegiance to Gage's Republican rival, George C. Pardee, the former mayor of Oakland.[36]

Mark White wasted no time informing his boss in Washington. A physician, Pardee was portrayed as a "professional man likely to handle the [plague] situation sensibly." His Democratic rival, Franklin Lane, an attorney affiliated with the San Francisco Health Board, expressed "no unreasonable opposition to the work of eradication." White believed that Pardee was more likely to be elected,

but neither candidate "would deem it polite to express the opinion that plague existed here." At the same time, "neither will commit himself AGAINST the work during the campaign."[37] At this point, the presence of plague concerned not only California but also the rest of the nation. If elected, Pardee would not oppose his profession and continue Gage's obstruction. Condemning Gage's "ostrich policy" about the existence of plague in San Francisco, the American Medical Association commented that "the country is to be congratulated" on the selection of Pardee.[38]

Just as California's gubernatorial campaign got under way, Wyman instructed another senior member of the service, Surgeon Arthur H. Glennan, to conduct an inspection tour in San Diego and call on Governor Gage in Los Angeles "to present certain matters for his consideration."[39] The trip appeared to be a hush-hush affair; the bureau even developed new code words for sending telegrams.[40] On duty in Cuba, Glennan immediately traveled to the Pacific Coast, arranging a meeting with the lame-duck governor, who had "retired" to his ranch in Downey, near Los Angeles. Provided with a letter of introduction, Glennan described his reception with the governor as friendly, the hostility toward federal officials muted. Gage hinted that he wished to relinquish the duties of his office as quietly as possible. Glennan explained the reason for the meeting: Surgeon General Wyman was interested in securing "cooperation to clear up suspicious reports" of plague in places outside San Francisco. Promising secrecy, the proposed plan would not be a hunt for more plague cases but an opportunity to ascertain the truth about the disease's existence. If needed, remedial measures could be recommended. Before allowing the governor to respond, Glennan brought out the stick: in the event Gage refused to cooperate and health conditions in California deteriorated, his administration would be censored nationally, particularly if it could be proven that the governor had failed to take the necessary precautions to spare his state and the rest of the country from a plague epidemic. The example of Texas, where the current health officer had already warned top state officials about the serious situation in California, did not bode well. Gage, after insisting once more that the disease under discussion was "syphilitic septicemia" or "pseudo plague," backed down and appeared persuaded by Glennan's "sincerity." He declared his willingness to cooperate with Wyman but not with San Francisco health officials and their "ridiculous" bacteriologist. The governor promised to appoint a state official to accompany Glennan on his investigations and suggested that he contact state health board secretary William Matthews.[41]

The reason for Glennan's mission soon became clear after the State and Provincial Boards of Health in North America convened a meeting in New Haven on October 29 with a comprehensive review of bubonic plague in California. With Wyman in attendance, delegates from Maine prepared a preamble and resolutions, moved by officials representing the state of Maryland with seconds from Pennsylvania and Connecticut. Furnished with a chronology of events since Wong Chut King's death to mid-October 1902, the resolution affirmed that plague had been present in California with no information provided as to its origin or exact location. Moreover, the resolution condemned the San Francisco Health Board for failing to take any effective steps while the health board of California conducted its "*mala fides*," or bad faith strategy. In view of these facts, the delegates resolved to "pronounce the plague situation in California a matter of grave national concern"; they requested that Wyman arrange at the earliest possible date a joint conference for the purpose of eradicating plague in the United States.[42]

Not surprisingly, the resolution caused great consternation among California's health authorities. Federal officials in Washington were quick to reassure them, explaining that the conference in New Haven was just a routine annual meeting of that organization; in view of his new public health responsibilities, Wyman's attendance was simply an act of courtesy. Moreover, the resolutions regarding California originated entirely from individual members attending the conference—prepared, printed, and then passed without prior discussion. To date, there was no imminent movement by states to set quarantines against California, but the special conference would probably approve further sanctions by the federal government.[43] Dreading more unfavorable reactions, the acting mayor of San Francisco (Schmitz was on the East Coast), H. U. Brandenstein, called an emergency meeting for November 1, to be attended by city health officials and Mark White. At the conference, Brandenstein read a telegram from the Washington correspondent for the *San Francisco Bulletin*. It quoted health board president Williamson's remarks in a lengthy *New York Herald* article, saying that plague was indeed spreading to other coastal cities and that Chinatown needed to be leveled by fire to stop the epidemic. The outcome of the meeting was a decision to once again bring the matter to Governor Gage's attention.[44]

A few days later, Brandenstein conferred with representatives of the governor, William Matthews of the state health board, and Daniel Kevane. Also attending the meeting were Mark White for the U.S. Public Health Service; Williamson and O'Brien for the San Francisco Health Department; Senator George

C. Perkins; Abe Ruef, Schmitz's attorney; Freemont Older, editor of the *San Francisco Bulletin;* chief of police George Wittman; and Supervisor Robert J. Loughery, representing the Southern Pacific Railway. During the discussions, Senator Perkins, who knew Wyman well, warned his colleagues that both the governor and his state health officials needed to recognize the existence of plague. Unless they were willing to take immediate steps to eradicate it, the State of California would indeed be quarantined, with disastrous financial consequences. Perkins urged the San Francisco authorities to intervene and demand from Gage approval to start all necessary sanitary measures. Arriving late to the meeting, Matthews, acting as the governor's representative, continued to doubt the accuracy of all plague diagnoses: "every Chinese on the coast was a sufferer with swollen glands," he was quoted as saying. Clearly in the minority, Matthews finally assured the group that he would comply with any "reasonable" instructions.[45]

Two days later, George C. Pardee was elected governor of California by a slim margin. The election was contested, but he prevailed following a ruling by the Supreme Court of California. The new governor was expected to fully cooperate with the federal government's measures to eradicate plague. Reports from the New Haven meeting had aroused considerable anxiety in California. By request, local newspapers omitted all references to the ongoing deliberations. Another meeting was arranged with Gage's representatives to hammer out an agreement for future sanitary inspections. At this conference with Matthews and Kevane, Arthur Glennan took pains to explain that the state authorities needed to approve a tangible package of emergency measures. These would strengthen outside confidence in California's ability to deal with a plague threat. He proposed a series of steps for dealing with the crisis. First, Governor Gage would appoint a "disinterested" professional who, together with federal representatives, would conduct regular "quiet" sanitary surveys of suspected places outside of San Francisco. If needed, these officials were to perform necessary bacteriological studies to confirm diagnoses. Second, if suspicions about the presence of plague arose in any locality, house-to-house inspections would resume under the supervision of proper local health authorities. Next, to satisfy national and foreign authorities, precautionary measures based on a model employed by the German government should follow, properly amended to conform to state and municipal laws. A final section proposed future legislation prohibiting dwelling and sleeping beneath ground, together with other sanitary restrictions regarding overcrowding, air space, and sunlight, among other concerns.

With both parties in agreement, a memorandum went to Wyman for approval. Glennan urged that it would be best to start immediately with the cooperative inspections.[46] Given their new predicament, the state health authorities were now expected to act in good faith and refrain from assisting the Chinese in hiding plague cases. In spite of the pressures, Matthews and others still insisted that Kinyoun's prophesies of a widespread epidemic had failed to materialize and claimed that "plague" in California behaved differently than in other parts of the world.[47] Still, Governor Gage finally acquiesced and expressed his wish to cooperate. At Glennan's suggestion, he appointed Matthew Gardner, surgeon-in-chief of the Southern Pacific Railway in San Francisco, as his representative. In Glennan's view, Gardner was "a man of large experience in professional and business affairs" who seemed the perfect liaison to California's key power player.[48] After several false starts, the intricate political maneuverings seemed to be bearing fruit.

The new collaboration began immediately with an inspection tour conducted by Glennan and Gardner through the East Bay, with visits to Oakland, Berkeley, and Alameda. Here they interviewed local health officials and physicians and studied mortality statistics and census figures. Based on the information, previous notions of Chinese people escaping to these cities to avoid discovery appeared wildly exaggerated.[49] No cases of plague could be found. They reached similar conclusions in San Jose, prompting Glennan to report that the Chinese were given too much credit for duplicity and evasion. Subsequent trips to Sacramento, Davisville, Stockton, and even Los Angeles also ended without evidence for the presence of plague. The investigations could not, of course, rule out the possibility that some infected people had left Chinatown and died in other localities, but no further local outbreaks followed. To confirm such findings in these population centers, Gardner and Glennan proposed additional studies requiring the presence of a bacteriologist working with health officers and coroners.[50]

Glennan's inspections with Gardner drew the attention of the San Francisco newspapers, which had deliberately remained silent on the subject. Under the headline "Plague Fake Is Exposed; Dr. Glennan Says Bubonic Tales Are False," the *San Francisco Call* on December 12 quoted Glennan about not finding plague victims, adding that specific cases were afflicted with a harmless disease, "chicken cholera."[51] Such results immediately revived the nearly moribund no-plague factions, promising further clashes. Glennan sought to publish a denial, but the *Call* refused to consider it. The publication even cited bacteriologist Mouser's opinion that these statements were a vindication of all his previous no-plague

diagnoses. Other local newspapers chimed in, creating another public relations disaster for the service. Even George H. Simmons, editor of the *Journal of the American Medical Association*, inquired about the well-publicized flap, reprimanding the surgeon general and charging that his service seemed to be working against the San Francisco medical profession.[52] With Glennan out of town, other service officers in San Francisco telegraphed Wyman, notifying him of the fiasco, which promised to derail recent efforts at collaboration.

Facing an emergency, Wyman headed to San Francisco, and Governor Gage called on him at his hotel on December 17. The same afternoon, the surgeon general met with health board president Williamson at his City Hall office; health officer Aloysius O'Brien and health board member Vincent P. Buckley were in attendance. Accompanied by Glennan and Assistant Surgeon Donald H. Currie, he inspected the service's laboratory and at night went into Chinatown with Gage's representative. For two more days, Wyman made his rounds, visiting with governor-elect Pardee, the presidents of the Chinese Six Companies, and finally Mayor Schmitz.[53] His message was always the same: plague existed in San Francisco, despite the sporadic nature of the outbreak. Methods to identify the disease were precise and universally accepted, and effective sanitary measures would eventually control it.[54] In his annual report, the surgeon general acknowledged that efforts by local health officials to eradicate plague infection were carried out under unusual difficulties and lack of support from state authorities. Nevertheless, according to Wyman, the future looked bright: with Glennan, Gardner, and a new California governor of high moral and professional standing, California's "ostrich policies" would be history.[55]

Federal Officials Target People and Rats

While events were transforming the political landscape of San Francisco and California, conditions on the ground in Chinatown also appeared to be shifting. With Consul General Ho Yow engaged in battling the reenactment of the Chinese Exclusion Law, the Six Companies and their Western attorneys challenged several regulations enacted in prior years. In early January, shortly after Schmitz's inauguration, Dr. George L. Fitch declared the death of three Tung Wah Dispensary patients as resulting from pneumonia, and, on the advice of James Maguire, working for the Six Companies, refused to send the bodies to the federal morgue. As expected, Fitch's application for burial permits was declined because of the federal "freedom from plague" requirement.[56]

Sensing the disarray caused by Mayor Schmitz's hostility toward the health board, James L. Gallagher, Maguire's law partner, informed city officials that the Chinese would no longer comply with this regulation, and he threatened legal action. Mark White cautioned Wyman not to take hasty retaliatory measures that would antagonize the Chinese and embroil the city in additional lawsuits. Because of Mayor Schmitz's current investigations of the health board, President Williamson also declined to respond. After consultations, Health Officer O'Brien agreed that no further cases would be removed to the federal morgue unless local health officials provided sufficient evidence for a plausible plague diagnosis. For his part, city bacteriologist Wilfred Kellogg inspected the three bodies at the hospital but failed to detect signs of the disease. Vindicated, Fitch recovered his right to issue death certificates for dispensary patients.[57]

Members of the virtually impotent health board also shifted their approach: the board now agreed to inspect Chinatown's sick and dead in their own houses or at the undertaker's facilities, always with permission from family members and friends. Mark White, writing to the secretary of the Six Companies, officially confirmed that this more respectful approach would also be acceptable to the Public Health Service. Because fewer cases would be sent to the morgue, the need for autopsies diminished, a fact that "very much pleased the Chinese."[58] Still, the prospects of sanitary isolation disrupting lives and businesses continued to hinder reporting; as long as notifications lagged, plague in Chinatown would continue.

To improve relations and perhaps diminish concern among Chinatown residents, White submitted an unorthodox plan for individuals potentially exposed to plague patients. After ten months of "painstaking observation" he no longer believed in the prolonged isolation of family and friends of the sick; a more lenient but still effective management for eradicating plague in Chinatown should be tried.[59] The assistant surgeon explained his idea through the hypothetical example of a Chinese merchant with ten clerks. If one of them became sick with plague, he was obviously removed and quarantined while the store closed for forty-eight hours and was thoroughly cleaned. The standard approach now employed required the isolation of the other nine contacts, who were left unable to care for their families and in danger of losing their jobs. When the store reopened, the merchant had the option of waiting two weeks for his former clerks to resume work or employing replacement workers unfamiliar with the business. White argued that exposed but healthy clerks should be allowed to continue working after disinfection as long as health authorities monitored them through

daily visits. From a political point of view, and given the stubborn resistance and hostility of the Chinese, the plan made sense.[60] Persuaded, Wyman and both the local and state health boards approved the somewhat risky suggestion, which was warmly embraced by Secretary Chew Wo of the Six Companies.[61] The Chinese leadership appeared more disposed to cooperate; another proclamation directed at "our country villagers" asked them to clean up their premises.[62]

White's plan encountered its first obstacle nearly three weeks later, when he and Kellogg inspected a dead body and, lacking any further information, sought to schedule an autopsy. A friend, present at the house, refused to allow the corpse's removal to the federal morgue, promising to hire an attorney and file for an injunction in federal court. Under the circumstances, Health Officer O'Brien decided to issue a death certificate listing "undetermined" causes to avoid another court case, but it set a troubling precedent. More worrisome was the behavior of state health inspectors, notably Elmer Stone, who had exasperated previous federal officers with his duplicitous behavior. According to the agreement reached with Mathews, Stone was empowered to attend all autopsies and receive tissue specimens for independent bacteriological examinations by the state board's consultant, Silas Mouser. However, his simultaneous employment with the Six Companies gave Stone the chance to examine sick and dead Chinese well before they were reported to the authorities. Following orders, he specifically selected chronic cases and systematically avoided people with acute, febrile illnesses. While such behavior was already well known, another tactic, described in great detail by Mark White, became apparent: whenever a suspicious death came to the attention of the federal officers and they scheduled an autopsy, Stone was nowhere to be found. White sent messengers to his office and the hotel in which he resided, but he remained unreachable. Local and federal officials were in a quandary: if they proceeded without him, they would be accused of uncooperative behavior and their findings challenged. Time was of the essence for a successful bacteriological examination; moreover, in accordance with city rules, decomposing bodies were to be placed in quicklime before burial, masking any relevant signs of disease. By the middle of May, a frustrated White wrote to Wyman proposing that a Secret Service detail be activated to investigate. "I regret to have to suspect Dr. Stone of such rascality but I believe he is perfectly suitable for such work."[63]

A typical example of Stone's tactics occurred by the end of the month, following the death of a young Chinese boy, nephew of another plague victim. In this case, Vincent P. Buckley, one of the health board members, had seen the

child before he died, but the body was removed to another part of Chinatown and hidden in an undertaker's "hall of tranquility" until discovered by the officials. White called Stone immediately to schedule the autopsy, but the state inspector failed to show up. He began the examination by himself, with Stone arriving late, merely viewing the body and leaving. White was under the impression that Stone was trying purposely to stay away so that he and the other state officials could later protest and threaten to end their joint inspection tours. For future examinations, Stone demanded to be contacted through his Chinese interpreter.[64]

Matters quickly reached a critical point after the death of Chen Guie, a 32-year-old male who worked at several gambling clubs and died in mid-July at the Tung Wah Dispensary. A day earlier, Chen had been to the dispensary where Fitch was apparently treating him for syphilis. On the morning of his death, he returned, but he collapsed and died in the waiting room just after seeing White. Stone was called at his hotel, club, and office, but there was no response. With the body transferred to the federal morgue, Kellogg arrived at 12:30 and insisted on starting the postmortem examination. Also present were Ryfkogel, Fitch, and several service officers. The provisional diagnosis was bubonic plague, subject to bacteriological confirmation. Even Fitch, who had steadfastly denied the existence of plague in San Francisco, seemed to agree with Kellogg's findings. After making further unsuccessful calls to reach Dr. Stone and being told that he would not be available until late that afternoon, the doctors limed Chen Guie's body.[65] However, White kept the corpse, attempting to contact Stone for the final inspection, which never took place. Unwilling to appear, Stone even impersonated one of his clerks on the phone to declare that the doctor was not available.[66]

During the ensuing six weeks, Mark White, with the invaluable assistance of Wong Chung, discovered ten additional plague cases in Chinatown. Perhaps the long-awaited epidemic outbreak was about to occur or Wong had been more successful in spite of threats.[67] Kellogg, a favorite target of Mayor Schmitz's displeasure, had taken a leave of absence from his position as city bacteriologist to visit laboratories and take courses in Europe. Since he also intimated that he would resign after returning in the fall, Schmitz selected Henry Ryfkogel as his temporary successor, even though he previously had supported the work of Phelan's health board and federal officials.[68] Ryfkogel's temporary participation in federal work was not well received by some of his academic peers, who felt it could embarrass University of California president Benjamin I. Wheeler

and jeopardize state funding for the Medical Department.[69] After returning from his travels, Kellogg did resign from his position and was replaced by Howard Morrow, a schoolmate from the University of California Medical Department who had graduated the same year as Kellogg.[70]

On August 23, White held a meeting with health board president Williamson concerning the increasing death toll from plague, including two cases of pneumonic plague. The rapid clinical course of the victims suggested greater virulence, and their concentration in the northern half of Chinatown hinted at a local focus of infection, despite previous Chinese efforts to blame unsanitary places outside the district.[71] Immediate action was imperative. With the encouragement of Supervisor D'Ancona, the San Francisco Health Board agreed to request funds. Among the measures outlined was the extermination of rats and search for dead rodents by examining Chinatown's buildings and tearing up the floors of infected houses. As before, there would also be extensive fumigations and "bichloriding" of infected houses and public places, such as theaters and gambling dens. On the assumption that flies could be involved as vectors of plague, fish, fruit, and meat markets needed to be screened to prevent food contamination. The same was recommended for stables.[72]

White's program for targeting rats was not novel, although their role in spreading plague had not been sufficiently emphasized. Once, during the second quarantine initiated by the health board in May 1900, the Board of Public Works briefly employed poisoned fish bait, placed into Chinatown sewers. At the end of 1901, White had revealed that the examination of some dead rats from Chinatown's garbage near Stockton Street showed conclusively the presence of plague bacilli.[73] Yet, no systematic eradication efforts followed because of a lack of funding. By April 1902, more studies in the service's laboratory using rats trapped in Chinatown had proved that they were indeed infected, suggesting that wholesale destruction of the rodents needed to be a key component in all future antiplague campaigns.[74] In late September, the *Chinese Western Daily* reported on the rat-catching plan developed by the San Francisco Health Board. However, sending rat catchers into Chinatown could be perceived as another source of residential harassment. The health department recruited Chinese workers for this task, to prevent rodents from breaking through the sewers and spreading the foul contagion beyond the district. Every rat brought to the authorities would fetch five dollars.[75]

The health department placed the first traps in Chinatown sewers in early November, under the supervision of an inspector.[76] Ironically, rodents obtained

from baited traps near the Public Health Service laboratory building on Kearny and Montgomery Streets, just outside of Chinatown, were found to be afflicted with plague while rats from other sections of the city and along the wharves seemed healthy. The authorities wondered whether prior poisoning efforts had prompted rats to escape from the district. The total number of plague-infected rats found in Chinatown and its vicinity between November 24 and December 4 turned out to be very modest, only sixteen. In the laboratory, Assistant Surgeon Donald H. Currie commented on the findings but cautioned about jumping to conclusions that the small number represented a massive die-off from poisoned fish.[77] The board requested more funds from the supervisors to mount a systematic anti-rat campaign. The shift toward trapping and poisoning rats as well as rat-proofing or demolishing derelict Chinatown buildings definitely signaled a new era in the quest to eradicate plague.[78]

Rat-infested Chinatown basement, ca. early 1900s.
Williamson album (author's collection).

"Beating the Tiger": A Mandarin's Downfall

Governor Gage's stubborn dedication to the no-plague proposition made him a dependable, albeit unwitting, partner of the Chinese. Protected, Chinatown's leadership continued its own policies of denial: they assailed "wolf doctors" for vilifying residents each time they reported another case of plague. With help from state inspectors in their hire, the Chinese Six Companies successfully selected and underreported the sick for the purpose of avoiding another intrusive cleaning campaign or, worse, a quarantine. Since his confrontation with Chong Tong Kai, Consul General Ho Yow remained notably silent in dealing with local authorities on plague matters. Wary of further political unrest and radicalization of Chinatown's work force, Ho confronted visiting members of the Empire Reform Party in 1901, exposing a devious and ruthless personality behind his urbane and polite veneer, which made him increasingly unpopular with Chinese workers and merchants.[79]

By the fall of that year, Chinese minister Wu Tingfang and Ho shifted their attentions to the Exclusion Act, set to expire on May 5, 1902. Their thesis was that the current American legal approach toward Chinese immigration remained an obstacle to expanded and preferential trade, sustaining resentment and hostility between people of both nations. News from Washington, DC, suggested that some Treasury Department officials also considered exclusion ineffective in its operation and hurtful to American commercial interests. They were willing to let it expire. After all, most of the hundreds or thousands of Chinese annually turned back from U.S. ports—including San Francisco—eventually succeeded in landing, encouraged by clansmen and employment offers from benevolent associations.[80]

In person and print, Wu and Ho sought to influence American legislators as well as leaders of commerce and industry.[81] Newspapers strongly resented such aggressive lobbying, characterizing the actions as an "exhibition of gall and effrontery never before witnessed in the United States."[82] In anticipation of the Chinese Exclusion Convention scheduled for late November 1901 in San Francisco, Consul Ho engaged in a debate with outgoing Mayor Phelan. He explained that American labor and the unions opposed the entry of Chinese workers into the country because they profited from a scarcity of labor. Yet these foreign migrants contributed in their own way to the productivity and wealth on the Pacific Coast. Displaying their class biases, Ho and Minister Wu unwittingly provided support for the exclusionist position.[83] In Ho's view, Congress had

passed the exclusion laws to appease organized labor even though the Chinese were actually not real competitors; they were essentially menial laborers, "wholly unskilled" and not mechanically inclined. The consul declared the current lack of assimilation an asset rather than a deficiency: living in separate colonies, the Chinese were not interested in intruding into American domestic life.[84] Usually quite anti-Chinese, local newspapers reacted forcefully to Ho's concept of "menials," an insult to Chinatown's beehives of skilled individuals, manufacturing clothing and footwear with the help of their ubiquitous sewing machines. Furthermore, Chinese residents and visitors appeared fascinated with American technological advances and sought to acquire them. Ho's argument was truly misleading, presented by a "shrewd agent of the Chinese Empire."[85] Regardless, Ho persisted, attempting to gather support for his elite views among friends from local mercantile circles, especially the shipping companies, hoping to pressure the San Francisco Chamber of Commerce.[86]

The outcome of the Exclusion Convention was never in doubt: delegates from California labor unions, trade officials, commerce organization representatives, and politicians, including members of the state's congressional delegation, drew up a memorial to the president and Congress urging the reenactment of the Exclusion Act.[87] The document cited health and sanitation among the prominent reasons for a continued ban on Chinese immigration. Health board president John Williamson even delivered a paper on the influences of Chinatown on the general health of San Francisco. His summary repeated previous characterizations of the Chinese as "reveling in dirt" and "wallowing in filth" despite the efforts of property owners who spent thousands of dollars for sanitary plumbing only to see it willfully damaged, with sewers opened and tunnels dug to provide waste disposal.[88] To compound anti-Chinese hostility, the year 1902 witnessed another resurgence of the tong wars in Chinatown, with four separate clans involved in a bloody struggle. The city dispatched additional police to the district, and the newspapers repeated calls for total removal of all Chinese residents.[89] At a department meeting, police officials seriously discussed such an expulsion, to be followed by demolition of buildings. Although such a plan was not legally feasible, it could succeed if Chinese exclusion continued, putting a stop to new arrivals and causing the remaining population to dwindle over time; shifting demographics would be unstoppable. "We can save ourselves if we realize that we are all in the same boat and will sink or sail together," the *Chinese Western Daily* countered; otherwise "ruin will await if we behave like fish that swims blindly into the boiling pot."[90]

Not much of the desired unity was on display when the local newspapers reported in mid-March that Consul Ho had been pelted with rotten eggs and vegetables during a performance at the Jackson Street Theater. No one in the audience was injured, and the items failed to soil the diplomat's regal robes. A day later, Ho indignantly denied that such an incident had occurred, admitting he had only briefly visited the premises with a guest and was received with courtesy.[91] Yet the report of the embarrassing episode advertised that his authority was compromised. The event was merely a prologue to a sensational announcement the next day: the foreign office in Beijing had filed charges of malfeasance against the Chinese consul general in San Francisco based on an official petition received from the Six Companies. Written on rice paper and bearing the official seal of the organization, the voluminous file had been sent to the Chinese minister in Washington for transmission to the imperial government. According to press reports, the document listed twenty-eight complaints concerning Ho's consular conduct. If the allegations could not be disproved, the diplomat would be recalled to China to stand trial. Informed of the grievances by telegram from his brother-in-law, Ho immediately met with the leadership of the Six Companies and promised an investigation into the matter. He told reporters that it was inevitable that a man of his position would make political and personal enemies, listing three factions opposed to his leadership: the "highbinders" or criminal brotherhoods, members of the Empire Reform Party, and local merchants who had accused him of taking bribes. "I have endeavored to conduct affairs with the least possible friction," Ho declared, "but someone must have hatched this plot."[92]

In Cantonese, "beating the tiger" meant unmasking a corrupt official. Soon, more details surfaced about the charges against Ho. The consul stood accused of not engaging aggressively enough in the debate about extending the Exclusion Act. Another key charge was that he neglected his official responsibilities and lacked a sense of duty to protect the interests and welfare of his Chinatown countrymen, a replay of earlier denunciations from his reformist opponents. Pettier were accusations that young Ho was a playboy, devoting a great deal of time to his racing stable; his jockeys wore the national colors, a yellow dragon jacket, reserved for imperial use only. Lavish expenditures on racehorses ($23,000 and $12,000) were bankrolled from "donations" obtained from pliant merchants. The consul responded that he liked horses and the racing flag displayed a four-toed dragon rather than the imperial one with five toes. There were also personal indiscretions, from playing poker to sipping champagne at all hours. He

kept mistresses in San Francisco and Los Angeles, had seduced a maid and then sold her as a concubine, and procured prostitutes for others. The latter charges were not surprising as Ho was on record defending the Chinese contract system that brought young indentured women to Chinatown, only to force them into prostitution.[93]

The unexpected news shook Chinatown and its leadership. Throngs collected around public bulletins to soak up the details of the scandal. Given the presence of Ho's spies and detectives, however, people refrained from publicly expressing their opinions. Leaders of the Six Companies entered a disclaimer into the minutes of their meeting, denying authorship of the accusations and indicating that the imprint and signatures on the document were forgeries. An anonymous member of the organization suggested that its leaders had no choice but to the charges. Admitting them would be foolish and dangerous; their family members could be imprisoned and persecuted in China. "Disgruntled highbinders" became convenient scapegoats, blamed for preparing and sending this bogus document to the Chinese capital.[94] When asked about Ho's forthcoming investigation, an official deemed it meaningless as both the consul general and the minister controlled all levels of Chinese power in the United States. A special envoy sent to conduct the probe would dishonor China's high-ranking diplomats and thus never be accredited.[95] In any event, Ho's impending recall demonstrated once more the actions of a collectivist society: "the peg that stands out is pounded down."[96]

Ho defended his consular affairs, proudly citing the creation of the Tung Wah Dispensary as the capstone of his San Francisco accomplishments.[97] He continued to conduct fundraising among merchants in San Francisco and even New York.[98] Thanks to his diplomatic prominence and business connections, donations continued to flow from other parts of the country, including the East Coast, and the facility had raised an additional $30,000 for building a new and larger establishment. By this time, the dispensary was treating about 400 patients per month, with many coming from places across, and even beyond, the Bay Area.[99] The dispensary's inpatient facilities had expanded, admitting patients suffering from advanced stages of disease. Of 475 officially reported Chinese deaths in Chinatown during 1902, 157 individuals perished in the hospital. This steady stream of institutional deaths was unprecedented and signaled a degree of "Westernization" brought about by repeated and involuntary associations between the Chinatown population and outside medical professionals involved in fighting plague.[100]

A list of mid-1902 dispensary consultants included prominent Western-trained physicians with faculty appointments at Cooper Medical College who practiced in other local hospitals. Several were surgeons, including William F. Southard, managing editor of the *Pacific Medical Journal,* and his son, Carroll, together with Albert S. Abrams, then a prominent society surgeon and faculty member at Cooper.[101] Adelaide Brown, an obstetrician and pediatrician, and her mother, Charlotte Blake, were also involved. Most surprisingly, the roster also featured renowned faculty from the University of California Medical Department: Harvard-trained Herbert C. Moffitt and Douglass W. Montgomery, both strong supporters of plague diagnoses who had been previously at odds with the Chinese leadership.[102]

Not surprisingly, Ho Yow's downfall affected Wu Tingfang's tenure in Washington. Although the minister insisted, "my skirts are clear," the complaint against Ho appeared originally to have been filed a year earlier. Wu had conveniently ignored it, and now he, too, faced accusations of improper conduct in diplomatic affairs. The minister seemed genuinely irritated when asked about his close association with the accused, his brother-in law, claiming that the family connection was accidental.[103] Despite repeated denials, Ho seemed uncertain about his diplomatic future because of his extensive family connections. He wished to return to the safety of Hong Kong. Moreover, he had been approached to organize a Chinese-American bank promoting trade between China and the United States.[104] While waiting for Chinese legation members from Washington to investigate his activities, Ho expressed eagerness to cooperate with San Francisco authorities in the preparations and funding for a visit of the new American president to San Francisco. Roosevelt intended to tour Chinatown, and the district was decked out as if for its New Year festival.[105] On April 26, Congress voted to extend the Chinese Exclusion Act for another ten years, a disappointing outcome for Ho and Wu's efforts and ambitions.[106]

Against the backdrop of new discussions during the summer to widen Dupont Street and demolish buildings in Chinatown, the *Chinese Western Daily* reported that 150 individuals had petitioned the Board of Supervisors to relocate Chinatown because of its filth and crime.[107] The reasons were deemed primarily economic; property owners and residents of North Beach and the Western Addition considered the district an impediment to further development of their neighborhoods. In their eyes, "the Chinese now have one of the best parts of town" but "forfeited their right to it by their habits of life." With the Exclusion Act renewed, another attempt at dislodging them seemed timely,

beginning with the search for a new site. Even some Chinese merchants, perennially harassed by criminal gangs, were said to be willing to move out.[108]

In the meantime, Chinatown remained unsettled, anticipating the departure of the disgraced consul general. There were new tensions between old rivals, the Sam Yup and Sze Yup associations. Because of increased tong activity, eight hundred Chinese merchants signed contracts with the Six Companies to create their own auxiliary police squad for protection.[109] Complaints from neighboring residents multiplied, prompting Mayor Schmitz and Chief Wittman to order arrests and close brothels and gambling houses.[110] In the midst of the turmoil, Ho sent a note to local, state, and federal officials informing them that the imperial authorities had granted him a leave of absence, and that Chow Yu Kwan, president of the Sam Yup Association, was authorized to function as acting consul. Ho left San Francisco, traveling east to devote most of his time "to a commercial enterprise."[111] Although expected, the news still stunned the district. Throughout his tenure and the plague crisis, Ho had repeatedly boasted of his connections with the Chinese minister, even promising federal protection based on the Burlingame Treaty. Without a voice in Washington to influence the American government, Chinatown felt even more vulnerable.

Chow Yu Kwan was a newcomer to San Francisco and its consular service; he had arrived in October 1901. Prior to his assignment in the United States, he was a bureaucrat, attached to a civil government department in Beijing. His ascendancy marked a new and uncertain chapter in the often-tense relationship between the chief local diplomat and the Six Companies, with the companies recovering some of their previous power because of Chow's lack of diplomatic experience. The real losers in this high-stakes diplomatic game were the federal health officials, who by now looked forward with optimism to Governor Gage's departure and future collaborative work with the state health board. Ho Yow, service members remarked, "understood the situation thoroughly and showed no disposition to hamper the work." By early October 1902, however, a hostile Chow Yu Kwan appealed to the Chinese minister in Washington, demanding that the federal health authorities desist from all postmortem examinations in connection with the plague eradication campaign. The newly minted diplomat had quickly transformed into a ringleader for those factions that opposed all work performed by the federal health officials in Chinatown.[112] His influence reflected an increasingly hostile attitude toward Wong Chung, the Chinese translator and detective still in the employ of the Public Health Service. Mark White suggested to Surgeon General Wyman that the Chinese

minister be told not to interfere with the performance of federal employees in the execution of their duties.[113] He explained that because of the recent increase in official plague cases, disinfections and isolation of buildings were, once more, building opposition among Chinese residents. Rumors circulated that Wong Chung was to blame for the increased reporting. At a special meeting of the Six Companies, several members of a brotherhood attempted to seize Wong, but he was ultimately saved through the personal intervention of the organization's president.[114] In response, Secretary of State John M. Hay officially warned Wu Tingfang to take all necessary measures to prevent further interference, temporarily avoiding another confrontation, but tensions remained high in Chinatown.[115]

Since the imperial government refused to pay indemnities for the costs incurred by foreign countries to put down the Boxer Rebellion, hostility toward China increased. Pleading poverty, its officials offered to pay reparations in silver rather than gold, and at a lower rate because of the nation's depreciated currency. This gesture, however, only confirmed to Westerners anti-Chinese stereotypes of selfishness and deceit.[116] Ho's brief diplomatic career was over, but his fall from grace was soft; he would become the manager and vice-president of the Chinese-American Commercial Company, with offices in San Francisco, Chicago, New York, and Hong Kong. The company had been incorporated in California with a capital stock of $1 million in gold by local and state bank presidents, including members of the well-known Spreckels family.[117]

On November 16, the disgraced consul, accompanied by his family and secretaries, sailed back to Hong Kong aboard the *Gaelic*. Prominent residents bid him farewell at the Pacific Mail Wharf. As the vessel drew away from the dock, Ho was conspicuous, holding up his son at the rail.[118] Officially recalled by his government, Minister Wu Tingfang sailed home ten days later, after sponsoring a lavish reception attended by hundreds of prominent Chinese and Americans. He was expected to become minister of commerce after his return to Beijing and thus referee the revision of treaties with the United States and European nations.[119] As 1902 came to an end, Chinatown's flamboyant mandarin had departed San Francisco, yet the plague still remained entrenched, and no one could predict the next twist in the story.

CHAPTER NINE

National Threat

1903

> The present danger to California and to the United States lies primarily in the persistence, during nearly three years, of a definite nidus of plague infection in that part of San Francisco known as Chinatown.
>
> —CONFERENCE OF STATE BOARDS OF HEALTH (JANUARY 19, 1903)

Is San Francisco Infected? Health Conferences and Railroads

The Congressional Act of July 1, 1902, establishing the Public Health and Marine Hospital Service, stipulated that the surgeon general call conferences if state and territorial health officials so requested. Because eleven states demanded a meeting to discuss the plague situation in California, Wyman arranged a session for January 19, 1903, in Washington, DC.[1] The law required the attendance of one representative from each state health board, creating a dilemma for California: Governor Gage's current state health board officers had consistently taken a no-plague stand despite all the bacteriological evidence San Francisco and federal health officials had found. Surgeon Arthur H. Glennan, who had replaced Mark J. White at the U.S. Public Health Service's headquarters in the city, was ordered to negotiate with the new governor of California. He eventually succeeded in getting Mathew Gardner appointed to represent the state. Gardner not only supported the work of the federal government but his prior employment as surgeon-in-chief of the Southern Pacific Railroad also provided him with valuable corporate connections.[2] Under Charles F. Crocker, this

railroad, dubbed "the octopus" because its tentacles reached into every political and mercantile aspect of California, consolidated its monopoly over freight and passenger traffic into San Francisco and Oakland.[3]

During the previous year, commerce flourished in San Francisco, endowed with the "finest harbor in the world." Trade with Asia widened with the establishment of new markets in Hawaii, Philippines, Japan, and China. Local wholesale houses with foreign agents displayed merchandise while American industrial products left the country through the Golden Gate to save cross-country freight costs.[4] Although troop movements to and from the Philippines had declined, the federal government continued to sponsor the U.S. Transport Station with its fleet of ships docking at the Folsom Street pier.[5] However, Elihu Root, the secretary of war, considered a draft proposal that would empower his department to outsource its chartered transportation business to a private commercial firm. San Francisco, still the home of the Pacific Fleet, was expected to bid successfully for this service, but there was a chance that the contracting firm could recommend a different port for future operations.[6] In an article titled "Must Fight to Retain Trade with the Orient," a local newspaper highlighted efforts by city and port officials in Seattle to intercept and procure commerce with Alaska and Asia traditionally flowing to San Francisco. The latest threat aimed at diverting the bulk of the Asia trade to the Northwest. Indeed, James J. Hill, the railroad tycoon and president of the Northwestern Railway, promised to carry government troops and supplies between Seattle and Manila at reduced rates.[7]

Following the establishment of Seattle as the railroad's western terminus in 1893, Hill had worked diligently in association with various steamship companies to make that city's port a prime hub for imports and exports to Asia. By 1900, Seattle had seen an eightfold expansion of its foreign trade, sending New England cotton, Midwestern grain, and Colorado minerals to China in exchange for tea, silks, and other products.[8] By 1901, Hill controlled both the Great Northern and the Northern Pacific Railways, but President Roosevelt ordered the dissolution of this monopoly under the Sherman Antitrust Act. Undaunted, Hill continued to offer highly competitive rates and fast service.

Although the Southern Pacific and Santa Fe Railways handled nearly all California's business, its affiliated steamship companies needed to protect their trade routes and bids on government contracts.[9] As the alarm was sounded in San Francisco's commercial circles, War Department officials announced that it would accept none of the proffered bids. Hill's proposal actually turned out to be higher than anticipated, but the threat was far from over.[10] Many, including

Governor George Pardee, suspected that the Northern Pacific Railway had all along encouraged the antiplague behavior of the state health board members, hoping to foster a national outrage against California and a shift in trade routes to other western states.[11]

At a preliminary session before the conference of the state health boards on January 18, Gardner introduced himself as Governor Pardee's temporary representative, claiming to be unfamiliar with the plague controversy and therefore not responsible for the actions of California's health officials. With Wyman absent, Gardner received a chilly reception, facing a small hostile group of state representatives led by John S. Fulton from Maryland, who tried to exclude him from the meeting. Attendees believed that California health officials seemed beholden to railroad interests, and Gardner's background with the Southern Pacific suggested a similar conflict of interest. Finally included in the deliberations, Gardner strategically retreated from his previous noncommittal attitude concerning plague politics while delegates indulged in "venting their spleens against San Francisco."[12] He tried to assure representatives that the new governor and San Francisco's commercial bodies now fully recognized the existence of plague and would join earnestly in its eradication. Gardner's offer to furnish telegraphic statements from Pardee and Schmitz was considered insufficient, and the delegates asked him to provide written guarantees that these officials would fully collaborate in a sanitary campaign. Informed of the problem, Governor Pardee pledged in advance to implement all measures approved by the conference, but his promise was not taken seriously.[13] The caucus voted 8-7 on a resolution asking Elihu Root, Secretary of War, to move the troop transport from San Francisco because of the continued presence of plague in that city.[14]

At the main conference on January 19, Wyman presented Surgeon Glennan's report of the inspections made outside San Francisco the previous December, stressing that Glennan and Gardner had failed to detect any evidence of the disease. He also mentioned his own recent visit to the city, including an inspection of Chinatown. Wyman claimed to have received personal reassurances from Mayor Schmitz that all opposition from antiplague partisans in the city had ceased. In response to questions, Wyman vaguely allowed that at present there was "not much" plague in San Francisco. Several conference members appeared unimpressed, and they sponsored two resolutions based on the perceived gross misconduct of the California State Board of Health, the hostile attitude of San Francisco's mayor, and the local press. The first measure dealt with the issue of the federal transport system. Wyman strongly objected to it, arguing that such

a decision was totally out of place. To be sure, there was a great rivalry between San Francisco and Seattle in this matter, but, in his opinion, this was not a proper subject for state boards to consider. With Gardner strongly lobbying on behalf of California against this resolution and delegates evenly divided, Fulton's attempt to reconsider the resolution for a vote of the entire assembly was temporarily tabled.[15]

A second measure sought to place inspectors on several California border points where railroads entered the state and to institute embargoes unless state health authorities took steps to suppress plague. Substitute resolutions without personal and official references passed narrowly during the morning session but were subsequently rescinded in the afternoon. Gardner opposed this measure too, categorizing it as an unwarranted quarantine of his state. He also argued that it was impossible to immediately obtain the desired assurances from California officials regarding the presence of plague. H. M. Bracken, a delegate from Minnesota, questioned the motives of Gardner's opposition because of his ties to the Southern Pacific. There were rumors that Edward H. Harriman, president of the company, had agents watching the conference proceedings. Others viewed the resolution as rendering an unacceptable ultimatum to California.

Brought up a third time, the transportation resolution was indefinitely shelved at Wyman's suggestion: the conference should not assume responsibility for directing the traffic of goods and peoples across the country. In a move that would garner him friends in San Francisco, the surgeon general firmly opposed the "introduction of intermunicipal politics" into the proceedings and believed that such declarations would only hamper future sanitary activities.[16] Wyman's move to scuttle these resolutions was shrewd, given the Southern Pacific Railway's political power in California.[17] "It is evident that the matter of the transports was dragged in through the influence of the Great Northern Railway and the Boston Steamship Company, serving the political ends of Seattle, Hill, and Morgan," commented Gardner.[18]

Before adjourning, participants at the one-day conference did approve several resolutions. Based on the investigations of local and federal health officials, all identified by name, "the presence of plague in California was established beyond debate," confirmed by Flexner's special commission and independent investigators in San Francisco, Chicago, Boston, New York, Washington, Baltimore, and Philadelphia. The evidence included complete autopsy records of ninety-three cases in possession of the Public Health Service and the San Francisco Health Board, published in their reports and medical journals.[19] The resolution assigned

blame to Governor Henry Gage and his state health board for obstruction; San Francisco's municipal authorities were denounced for failing to support their city health board. The situation was serious: at stake was "the safety of the United States." Delegates demanded competent city and state health boards and full cooperation with the Public Health Service. Everyone was required to proceed under definite, harmonious, and effective laws and ordinances, with ample funds provided for their tasks. Finally, in a gesture toward the conference organizer, attendees passed a resolution agreeing that California and the country had been served well by the Public Health Service.[20]

Following the conference, Wyman wired Glennan a message reiterating that an acknowledgment of the presence of plague would not affect San Francisco's transport system.[21] In turn, Gardner sent telegrams to Governor Pardee and William F. Herrin from the Southern Pacific Railway, insisting that California needed to urgently recognize the presence of plague and thus avert quarantine from at least twenty states represented at the recent meeting. In spite of the threat, local San Francisco newspapers continued their strategy of denial, calling the conference's resolutions "silly," even "absurd."[22] A month later the print media decried the "campaign of slander waged by those cities of Puget Sound and British Columbia which hoped to profit commercially by exploiting the plague scare."[23] The misinformation was quickly spreading to the eastern United States and various foreign countries, including Mexico and Ecuador, prompting local business leaders to demand an investigation from federal authorities.[24]

Misgivings about the resolutions presented at the conference of the state health boards intensified in San Francisco. Suspicion lingered about the true motives of Dr. Bracken of the Minnesota State Health Board, who had used the specter of plague to insist on the transfer of land and maritime transportation services.[25] His state had much to gain from such a transfer, as Hill's railroad empire crossed Minnesota on its way to the Pacific Northwest.[26] Despite Wyman's reassurances, the Great Northern Railway and its "empire-builder" president, James J. Hill, remained a real concern for San Francisco's merchants. In mid-February 1903, a new Mercantile Joint Committee passed a resolution to support a combined state and federal cleaning campaign, in part because of its concern with Hill's ambitions.[27] Chinese merchants strongly supported the criticism of Hill, accusing him of conspiring behind the scenes with the federal government. Their livelihood was also on the line: tarnishing San Francisco's reputation as a commercial center and prime transportation hub on the Pacific Coast would severely restrict commerce with China. The *Chinese Western Daily* exhorted the Chinese

that "now the urgent and crucial matter was to clear San Francisco from plague accusations and make sure that no one would ever use them against the City."[28] In their opposition to Hill, downtown and Chinatown could find common ground.

With the first annual conference of state health boards officially scheduled for June 3, 1903, California's sanitary officials struggled to repair its reputation around the country. To make matters worse, Secretary Root once again threatened to outsource and privatize military shipments, calling for new bids on the transfer of men and supplies to the Philippines. Observers realized that freight to the Philippines could definitely be shipped more cheaply from Seattle than from San Francisco, and Hill was willing to sacrifice a great deal of money to snatch the contract. He also was rumored to be close to the war secretary.[29] Once more, anxiety among San Francisco's commercial circles was palpable; all steamship companies engaged in maritime traffic between San Francisco and Asia were asked to support the local port.

In late April, Southern Pacific president Edward H. Harriman arrived in town, ostensibly to inspect his properties but also to confer with local business leaders about the competition for the transport service. He met with the Pacific Mail Company and San Francisco's commercial bodies about the new, bigger ships that could offer favorable rates to the federal government. Involved in the deliberations with Harriman were George Newhall, president of the San Francisco Chamber of Commerce, and Pacific Mail's general manager, Rennie P. Schwerin. In railroad circles, it was generally conceded that, as politician and lobbyist, Harriman had more influence in Washington, DC, than Hill. A prominent official was quoted as saying that the people of San Francisco should not dread the result of this contest between two powerful railroad tycoons. Harriman had the interests of the city at heart and would make every effort to retain the present arrangements at this port. Every argument seemed to go against the pretensions of Hill to replace San Francisco with Seattle. The city at the Golden Gate had one of the largest, best-equipped military posts in the country while the state of Washington suffered from a rainy, "disagreeable" climate. Convalescent soldiers coming from the torrid Philippines would face the frigid Puget Sound climate during winters. Concerns remained real, however, that Hill could still win the contract, and the sanitary argument about the suspected presence of plague in San Francisco remained central to the dispute.[30]

On June 3, Wyman called to order the First Annual Conference of State and Territorial Health Officers in Washington, DC. N. K. Foster, California's new health board secretary, officially represented the state. In his opening address,

the surgeon general explained that this meeting was a historic event. For the first time in America, a congressional act provided a venue for "harmonious and cooperative" efforts regarding public health matters between federal and state governments. Wyman acknowledged the obstacles preventing cooperation since, in the past, federal authorities usually had hesitated to extend their influence into state affairs. In the previous decade, however, the original Marine Hospital Service developed and strengthened its status around the country through a series of congressional acts, even as state health organizations were themselves being perfected. This confluence of interests and powers created a favorable climate for cooperative work in sanitary affairs. Thanks to the new organization, states, individually or collectively, could now seek aid from the government without appearing to surrender their own constitutional powers. Wyman promised that "suppression and elimination of disease and cultivation of health and strength will allow the U.S. to take a leading position among nations in the world."[31] Foster, for his part, explained that the California State Board of Health had been entirely reorganized and its goal was "to be entirely frank" with the people of California, the United States, and abroad.[32] No further discussions focused on the transportation issue that had created so much anxiety. Thanks to Harriman, San Francisco retained the contract, although the plague situation still remained "unsettled."

Leaders under Pressure: A Shift in Health Policies

Even before the representatives from many state health boards had indicted California for its response to the plague, outgoing governor Henry Gage delivered his final message to the California legislature. To no one's surprise, he reiterated that there was never bubonic plague in San Francisco, but he characterized Surgeon General Wyman as a "highly distinguished public officer and medical scientist" with Glennan his "proficient and accomplished assistant."[33] Both would save California from further threats of improper quarantine and reckless investigations. Gage blamed Kinyoun and his local health board allies for sending "misleading" reports; yet Chinatown still needed to be removed. He concluded that the plague scare taught him that it was the duty of Californians to deal with their own problems and guard against encroachments from the federal government.[34]

Gage's successor, George C. Pardee, was a physician turned politician, a native Californian from Oakland with impressive professional credentials. Educated at the University of California, Berkeley, Pardee attended Cooper Medi-

cal College in San Francisco for two years before traveling abroad and obtaining his medical degree at the prestigious University of Leipzig in Germany. Specializing, like his father, in ophthalmology, Pardee practiced and entered into local politics with him in Oakland. Appointed to the local health board, and later elected to the city council, Pardee became mayor for the 1893–95 term. During his tenure, he earned his antilabor nickname "pick-handle" when he used the armed militia against striking members of the American Railway Union.[35] Viewed as an independent Republican less pliable to California's railroad interests, Pardee won a close election that failed to give him a strong mandate to govern. In sharp contrast to his predecessor, he approached his job with caution, modesty, and an open mind. Although the issue of plague in California was gaining increased notoriety, Pardee avoided any reference to health-related issues in his inaugural address.

However, days later, during a private meeting with Surgeon Glennan, Pardee pledged his support for the work of the U.S. Public Health Service, characterizing the conduct of his predecessor and state health board appointees as "reprehensible."[36] This was somewhat disingenuous. In June 1900 he had been a member of the California delegation to the Republican convention in Philadelphia that pressed President McKinley into canceling Kinyoun's federal travel ban. At the time, Pardee strongly expressed the opinion that there was no plague in San Francisco. Now, however, he pledged to withdraw the state inspectors currently working in Chinatown who incited the Chinese to conceal their dead and continuously obstructed diagnostic efforts to find additional plague cases.[37]

When the resolutions passed at the conference of state health boards in Washington, DC, reached him, Pardee was quick to express his willingness to improve relationships between California and other states. The governor also made it clear that he would accede to requests from the "wise Easterners" for general fumigations of certain parts of California and, in due time, select his own board of health.[38] However, pressed by a reporter, he eluded the direct question of whether plague existed in San Francisco. So far as he was concerned, plague or any other disease would still demand sanitary measures. Instead of arguing diagnoses, his intent was to follow the recommendations issued by the delegates who met in Washington. To carry out the work, California could use the $60,000 in the fund that the Gage administration had set aside for health emergencies.[39]

Surgeon General Wyman was not entirely satisfied with Pardee's noncommittal stance. In a telegram to Glennan, he stressed that there was a "very

strong and determined feeling" at the recent conference concerning the presence of plague in California. Pardee's statement failed to inspire confidence in the minds of health officials around the country.[40] Wyman authorized Glennan to once again contact Pardee and Schmitz, urging them to unequivocally admit the presence of plague. Only this "confession" would allay the widespread feeling of concern and resentment toward the state. After years of dithering, everybody expected candor from state and city authorities regarding this problem.[41] Gardner suggested that the governor confer with Mayor Schmitz about turning over the entire management of plague prevention to the federal government.

New on the job and pressured from all sides, a cautious Pardee remained guarded. Emphasizing that he wished to work in "complete harmony" with federal officials, he was determined to put an end to suspicions and improve the image of California outside the state. If medical authorities emphatically believed that plague still existed in San Francisco, "that settles it as far as I am concerned," he told a reporter.[42] Wyman was still not entirely satisfied with the oblique admission and also waited to hear from Mayor Schmitz. The surgeon general suspected that several states were looking for an excuse to quarantine California. Once more, Glennan tried to force an official statement, but the new governor was not a pushover. Under the current political circumstances and with his narrow election, Pardee was unwilling to spend this kind of political capital at the very start of his administration. Openly proclaiming the existence of plague could signal his political demise and cause a split in the already-divided Republican Party. No official acknowledgment could be expected.[43] In the meantime, however, Pardee deliberately sought to dislodge all previous state health board cronies, officially withdrawing Gage nominees for extended appointments. Inspectors William Lawlor, Elmer Stone, and William P. Read were also relieved of their posts.[44]

Conditions in San Francisco remained murky. In his annual message to the Board of Supervisors, Mayor Schmitz boasted that the health board's "theatrical measures" in relation to the "unfounded" plague had been "happily minimized." The current Board would provide no further notices to the world.[45] Since John Williamson's term as health board president had expired, Mayor Schmitz placed his 1902 appointee, James Ward, in that position. He also reappointed a previous nominee, J. Coplin Stinson, a Canadian surgeon and physician of the British Benevolent Society, to the vacancy. Ward, however, failed to be elected president; the remaining "bubonic" members—Vincent P. Buckley, William B. Lewitt, and Rudolph W. Baum—opposed the candidacy of the homeopathic physician. Michael Casey, president of the Board of Public Works and another ex-officio member,

refused to vote "for good reasons," creating a deadlock. His intentions soon became clear: Casey, a popular union leader of the Teamsters, cleverly managed to get himself elected to the post of health board president with the vote from the three remaining Phelan appointees as well as his own. An indignant Schmitz deplored Casey's maneuver and questioned the legality of the appointment as Casey was neither a physician nor an appointed health board member.[46] This seizure initiated an open and bitter feud between the two men with potentially serious consequences for the sanitary campaign in Chinatown. In a confidential letter to Wyman, Glennan confirmed that the city health board was unstable. With Michael Casey holding the controlling vote, Glennan thought that the new board would be as ineffective as the old one.[47] Events, however, would prove him wrong.

Schmitz suffered further embarrassment when news leaked from the Washington, DC, conference: Wyman had implied that the mayor, in the presence of a witness, personally admitted to him that the disease afflicting Chinatown was plague. Ostensibly, this acknowledgment had occurred during the surgeon general's December 1902 visit to San Francisco, when Schmitz promised to do "everything possible to rid Chinatown of the disease."[48] Michael Casey, in the meantime, removed several employees from the health department with approval from the remaining Phelan appointees. Unfortunately, some of those let go had been employed under the patronage of supervisors, a fact that caused new tensions and promised financial reprisals potentially harmful to an already cash-strapped health board.[49]

San Francisco could hardly afford a dysfunctional, bickering municipal government. It was time to put a stop to current stories about the presence of plague in the city. In Mexico and Australia there were already bans against the importation of San Francisco goods, thus opening the door for increased trade with ports like Seattle and Vancouver. This was an opportunity to demonstrate to the world that the plague reports were false.[50] At the end of January, the city's business community created the Mercantile Joint Committee to secure combined sanitary and preventive activities from local, state, and federal health authorities. Sponsors included the California State Board of Trade and the California Promotion Committee, together with the San Francisco Board of Trade and Chamber of Commerce. Frank J. Symmes of the Merchants Association became president, filling a post that would become critical for future sanitation in Chinatown.[51]

Worried that any official admission of the existence of plague in the city would prompt a quarantine and removal of the transport service, the new organization

offered its financial support for a joint campaign against an "alleged" plague.[52] Despite the gesture, Wyman still insisted on a candid admission about the presence of plague, but the merchants ignored him.[53] Glennan was authorized to explain that unless the resolution was unambiguous, the operations and the reputation of California would remain compromised, forcing a withdrawal of the U.S. Public Health Service from San Francisco.[54] Faced with no alternative, the Mercantile Joint Committee finally admitted that ninety-three cases of plague had been found in the city over a period of thirty-five months, pledging support for an immediate and cooperative campaign. A resolution addressed to both Mayor Schmitz and Governor Pardee urged them to take action and remove all fears of infection. The committee asked both the mayor and governor to sign the statement that "there is no present or future danger from that disease (plague) inasmuch as complete and harmonious action by all health authorities concerned is hereby assured and will be maintained."[55] "Taken by storm," Mayor Schmitz reluctantly placed his signature on the document, and it took "considerable persuasion" to have Governor Pardee do likewise in Sacramento. At last, the merchants had risen to the occasion. They were now ready to dole out cash and strengthen the hand of wavering politicians.[56]

With the Mercantile Joint Committee firmly on board, Wyman informed business leaders that no further cases of the disease had been discovered and reported since early December 1902, more than two months ago. Conditions in Chinatown appeared satisfactory thanks to the ongoing sanitary surveillance and cleaning operations.[57] The official news, transmitted to the State Department and the governments of Mexico and Ecuador, was designed to convince foreign countries to lift their commercial embargoes of California. With diminished trade, half of the steamers and sailing vessels plying the Pacific Coast already sat idle, with financial losses estimated at a million dollars per month.[58] Persistent plague deniers, for their part, welcomed Wyman's reports as providing official sanction to their long-held beliefs.

Relations between Schmitz and Wyman remained strained. In a public statement to the Board of Supervisors, the mayor declared the statement about his plague admission to be false, denying he ever made or implied it. Through the secretary of the health board, the mayor sent a letter to the surgeon general in June, drawing attention to a "matter seriously affecting the Health Board of this City and your personal veracity."[59] The missive demanded a written and signed confirmation of Wyman's assertion as well as the time and place in which it was made. "The Mayor's reputation cannot be a matter of unconcern to you," the let-

ter continued, hinting that this topic would have an important bearing on the continuation of sanitary work in Chinatown. An immediate reply was requested but apparently never received.[60] The mayor got further bad news when Governor Pardee refused to sign legislation that would have allowed the removal of officials such as Phelan's remaining health board members, thus ending Schmitz's efforts to oust them.[61] To discredit them, Schmitz accused the three remaining "pestiferous" members, Buckley, Baum, and Lewitt, of spreading "false and malicious" reports responsible for a Mexican embargo of goods from San Francisco.[62]

Federal dealings with the Pardee administration entered a new era of collaboration. On April 1, the governor reorganized the state health board with Matthew Gardner as president and N. K. Foster of Alameda as secretary. The other members included Wallace A. Biggs and A. C. Hart from Sacramento, Martin Regensburger from San Francisco, O. Stansbury from Chico, and W. LeMoyne Wills from Los Angeles. All new appointees traveled to San Francisco, visiting the Public Health Service's laboratory and making an inspection of Chinatown, where they strongly endorsed the current joint activities with federal and local officials.[63] Unfortunately, two weeks later, Gardner died suddenly following surgery for appendicitis, a crushing blow for the blossoming collaboration. Pardee appointed Regensburger his successor, with the vacancy to be filled by F. G. Ainsworth, a Los Angeles practitioner now working as chief surgeon for the Southern Pacific Railway in San Francisco.[64]

Governor Pardee actively continued to court participants in the impending conference of state boards, authorizing N. K. Foster to represent California at the meeting. On May 15, Pardee wrote a letter to the conference president, stressing the cordial relations established between the federal and state authorities over the past five months. The Pardee administration now aimed at a policy of "perfect frankness." There was no intent to cover up or conceal anything. On the contrary, if any cases of plague should appear, the fact would be "freely and fully acknowledged." Foster was authorized to announce that the whole force of the state was now behind its health board and that California welcomed anyone who wished to visit and inquire into its sanitary conditions. While the situation remained "unsettled," California health officials would be meeting again in the fall for the purpose of improving hygienic laws and education in public health issues.[65]

The first California State, County, and Municipal Sanitary Conference took place in San Francisco on September 8. Despite Foster's efforts, attendance was limited. Donald Currie, who represented the Public Health Service, delivered a

paper about rats and the dangers of spreading disease,[66] yet the conference failed to endorse the current sanitary work, claiming insufficient information.[67] Albeit brief, the meeting nevertheless achieved its main objective: the creation of a statewide network representing public health officials capable of providing advanced sanitary information and coordinating preventive activities.[68] In less than a year, California had experienced a substantive transformation. Instead of following Gage's policies of denial, negligence, and willful deception, the Pardee administration was on record to adopt a series of realistic and collaborative public health programs proposed by a national consensus of experts.

San Francisco was another matter. Health board president Casey explained in San Francisco's Municipal Reports for 1902–1903 that the mayor had prevented the release of monthly vital statistics—a source of great local pride—because it contained information about thirty-eight official plague cases. Not only was Schmitz still preoccupied with removing Phelan's board members, but he also continued to duck questions about the presence of plague in the city. Designed to protect the commercial interests, Schmitz's conduct achieved the opposite effect, creating more distrust and triggering commercial embargoes.[69]

Real Estate and the Plan to Raze Chinatown

Newspaper headlines in early January proclaimed 1902 "San Francisco's Greatest Year in Real Estate" because of large purchases of business properties in the city's center. Prospects for 1903 appeared even better. Ferdinand E. Hesthal, real estate magnate and notorious Chinatown slumlord (he owned the Globe Hotel) was prominently listed as obtaining another large mortgage. Under the circumstances, experts predicted that owners of good income properties, including those in Chinatown, would be unwilling to sell; equally profitable investments elsewhere would be difficult to find.[70] However, landlords in the Chinese district faced many challenges. By late January, San Francisco authorities were making plans for a forceful removal of people living in dilapidated and poorly managed buildings that grossly violated current health regulations. Having repeatedly called on Chinatown residents to pay greater attention to sanitary issues,[71] even the *Chinese Western Daily* complained of dimly lit and filthy streets that forced people to cover their noses and wrap their feet when walking around. "Chinese people gamble and smoke all day, exhibiting all kinds of bad East Asian habits," the paper admitted, especially blaming "our callow, impressionable youths." Chinatown's businesspeople had no choice but to report the deficient conditions

and abide by sanitary regulations. The essay suggested that proprietors assume more responsibility for renovations and expansions, steps that would help restore interiors, aid shopkeepers, benefit pedestrians, and eliminate vice.[72]

To compound the problem, the San Francisco Board of Public Works submitted in December 1902 a preliminary proposal to cut new streets through Chinatown for the purpose of hauling cargo over Russian Hill to the shore. The plan, meant to improve the flow of traffic across irregular and steep grades from Market Street to the northern end of Van Ness Avenue, called for a straight thoroughfare running diagonally and thus slicing six city blocks located in the heart of Chinatown.[73] The scheme, endorsed by the Merchants Association, was intended to improve access and boost real estate values.[74] Another idea, also endorsed by neighboring businessmen, suggested that the entire Chinese district be turned into a public park.[75]

By early February, the Board of Supervisors took up the street project. Road construction would definitely affect Chinatown, dismantling part of the district. Represented by attorney Jason Azinello, Chinatown property owners opposed the plan. They argued that the city had failed to consult them and that the scheme could actually harm their investments. Supervisor Marsden Manson rejected this argument, insisting that the design would spur new construction and enhance property values at no cost to current proprietors. In the end, some owners appeared persuaded by this argument, but the meeting ended with opinions evenly divided.[76] The official Chinese reaction was swift: their newspaper labeled the expansion project "another plot to evacuate Chinese" from what was increasingly valuable property. "Unless we landowners, Chinese and Western, work together to stop this underhanded scheme, all of Chinatown will be destroyed by the construction of their roads, and we will have allowed them to replace our heritage with padding for their feet."[77] At that point, the proposition to cross Chinatown with a new street was, in all likelihood, already dead since supervisors from the street committee and the board of public works were already at loggerheads over the project.

Instead, Supervisor Samuel Braunhart and the board came up with a new and less disruptive plan: build a serpentine thoroughfare by widening Dupont Street from Bush to Broadway Streets. Casey, however, considered this new scheme impractical because the grade was too steep from Bush Street northward; opposition to the project also came from owners in the path of the road likely to be assessed for improvements.[78] Soon, the project to create new streets through Chinatown was abandoned because of conflicting interests of

officials and landlords.[79] Instead, the public park proposal resurfaced. Proponents resurrected the argument that Chinese residents were prone to foreign diseases and that contagion in the densely populated district constituted a perennial danger. To prevent disease, all Chinese were told to reestablish their residences elsewhere so the city could convert the former Chinatown into a recreational park.[80] To finance the project, half of the parkland could be sold privately for the construction of "magnificent homes that would be the admiration of the world."[81]

In early March, the Merchants Association followed up on the park project. In a petition to the San Francisco Supervisor's Committee on Public Utilities, the association's president, Symmes, demanded the removal of Chinatown to make room for parkland.[82] The estimated costs of moving six streets in the current district would not exceed $6 million and could be financed through bonds. But was it worth spending such a large sum of money for creating another park in the city? Merchants argued that purchasing the land and moving Chinatown was cost effective: several states and foreign countries would cancel their quarantines against San Francisco. No expenditure for the planned relocation was too extravagant because its benefits would last for decades to come. Another option was to distribute the costs among all San Francisco's commercial interests; certainly nobody would refuse to pay their fair share.[83] Although some supervisors were in favor of financing the park through a bond issue, a majority remained skeptical, especially Arnold D'Ancona, who stated that he could find nothing beneficial about the proposal.[84] If the health board were allowed to continue its sanitary work in Chinatown, there would be no danger of the spread of any disease. Surely an expenditure of less than $1 million would destroy every unsanitary part of Chinatown and put the district in an "absolutely beautiful condition," an option preferable to creating another park and saddling the city with an additional $10 million debt.[85]

With Chinatown's relocation through street widening or the creation of a public park effectively tabled, merchants redoubled their efforts to persuade the Schmitz administration to at least selectively raze decrepit wooden structures in the district. In mid-March, protected by police, a corps of laborers from the public works department went into an L-shaped interior courtyard behind St. Mary's Church at the edge of Chinatown to tear down a series of shacks dating from the 1860s. The property belonged to the Giannini and Scatena Company, wholesale fruit and grocery dealers. Using pickaxes, crowbars, and saws, the workers shattered decaying wooden floors and makeshift wall partitions, tearing down the grimy old lumber from balconies and closets, then setting fire to the

debris; wagons hauled out the rest. Finally, a sandblasting machine scoured the adjacent brick walls from roof to basement before sanitary workers whitewashed them with lime chloride.[86] At once, the local press came out strongly in support of such demolitions, characterizing them as a "heroic method to be carried out without flinching" to reduce the Chinese district "to a condition of civilized decency." Newspapers blamed the "greed of landlords and lessees" for the situation, call-

Razing condemned buildings, Chinatown, early 1900s.
Williamson album (author's collection).

ing their long-tolerated "uncontrollable desire for gain" outrageous and suggesting that every decrepit building be similarly razed.[87] Predictably, however, the so-called purification of Chinatown immediately came to a halt when workers arriving at another site were served with a restraining order. One of the owners, Lorenzo Scatena, a "commission merchant," had secured a temporary injunction. His attorney estimated the damages for destroying a few old balconies at $10,000 and was suing the health board for payment of those damages.[88] Yet, in court, the defendants were able to present thirteen affidavits from local, state, and federal health officials on their behalf, preventing the suit from succeeding. Perhaps the law had opened a new path for dealing with the Chinatown problem.

San Francisco's commercial organizations called a special meeting of the Mercantile Joint Committee. The group decided to take immediate steps toward gradually "parking out" the entire Chinese district, considered the only effective means for eliminating the menace of another quarantine, which could cost the city over a million dollars in financial losses. A formal resolution stated that "the welfare of San Francisco demands the entire removal of Chinatown from its present location and the reconstruction of the district."[89] Committee members drawn from several organizations expected eviction to begin soon, and they petitioned the supervisors for a bond issue to finance the wrecking and makeover. Many citizens also seemed to favor such a plan.[90] Even Gardner, as state health board president, had been in favor of demolitions regardless of injunctions: "remove nuisances first and provide explanations later," he recommended, a strategy supported by San Francisco health officer Aloysius O'Brien.[91] The local health board was encouraged to be relentless: when courts stopped demolitions in one place, workers should start elsewhere. Three teams could be at work in different locations, one taking photographs that documented the seedy conditions as evidence in possible legal actions. The Mercantile Joint Committee even offered legal assistance to the health board in an effort to slow down or stop all lawsuits and injunctions arising from sanitary work. On April 10, President Symmes signed a resolution proclaiming the legal challenges to demolition detrimental to public welfare.[92]

The Chinese residents interpreted the demolitions as another example of long-standing racial hatred, already amply displayed by the "wolf doctors." The current vice-consul, together with representatives from the Six Companies and influential merchants, gathered to discuss their options with attorney James Gallagher. His opinion was that no one could force a Chinese exodus without just cause. The

mutual protection treaty between China and the United States would safeguard Chinatown residents and ensure that property rights remained protected. If the district's current location was considered harmful, two options presented themselves. The city could select a suitable location for resettlement that no one would object to, or rents could be significantly raised, forcing people to move away. The editor of the *Chinese Western Daily* exhorted residents, "We in Chinatown must work together to ensure that those who want to demolish it do not succeed."[93] Days later, a Chinese renter went to federal court petitioning for an injunction that would prevent the demolition of the structure he was occupying. Several men, agents of the health board, had come to his place claiming that the premises were unhealthy and needed to be torn down. Over a period of three days, they destroyed parts of the building, tearing down doors and walls, carting away gates, all without a prior condemnation order.[94] The plaintiff alleged invasion of private property under the pretense of contagious disease and demanded $10,000 in damages, as his business had suffered irreparable injury. Moreover, the destruction represented an unlawful discrimination against the Chinese; city dwellings in similar conditions located in other neighborhoods were not being condemned.[95]

As the legal challenges made their way through the courts, the Giannini and Scatena Company settled its dispute by withdrawing the application for an injunction and agreeing to make all repairs or improvements required on the properties in question. This unexpected reversal was the first instance of white Chinatown property owners backing away from legal redress.[96] The sudden turnaround seemed related to a Merchants Association resolution strongly disapproving of the actions of landlords opposed to the cleanup, condemnation, and removal of unsafe and unsanitary buildings.[97] Owners finally realized that stubborn resistance to repairs and improvements was becoming untenable. Their right to legal redress would bring the planned sanitary work to a halt. If Chinatown failed to be cleaned up, the safety and welfare of San Francisco and California would remain in jeopardy. Opposition also meant high legal fees and plummeting real estate values without eliminating the possibility that frustrated city officials would still decide to raze all buildings and create a park. Most Chinatown landlords were shrewd businessmen; they calculated that a comprehensive cleaning and demolishing campaign would actually benefit their properties, destroying crumbling "rookeries" tacked onto buildings, updating sewers, paving streets, and removing garbage. Moreover, federal, state, and city authorities would pay part of the cleaning costs while some expenses could be passed on to renters.

In early summer, the city's chief sanitary inspector, William C. Hassler, reported sporadic boycotts by Chinese tenants. In one example, on Washington Street, the owners had spent $8,000 in repairs and improvements. According to the Public Health Service's interpreter, Wong Chung, the proprietors were already trying to recoup their expenses by substantially raising rents. They started charging five dollars per room per month instead of the earlier customary three dollars, thus forcing many to leave. Disgruntled, former occupants protested and demonstrated, trying to keep newcomers away.[98] In the main, however, Chinese renters remained loyal and dependable customers. They bargained hard with agents and owners and then turned around and sublet the premises for considerable profit. No sensible landlord wished to force them out of their leases. Encouraged by support from the Merchants Association, the health board decided to move forward, condemning additional structures—twenty-six in all—for violation of the cubic air ordinance.[99] Nevertheless, the goal of completely razing and removing Chinatown was never abandoned. At a meeting held in Sacramento on May 11, Martin Regensburger, the new president of the state health board, spoke once again about the "large alien and inassimilable" population in the heart of San Francisco that posed a constant menace to health, commerce, and industries, to the city, to California, and to the nation. Voices outside California chimed in. One prominent Washington lobbyist for the San Francisco Chamber of Commerce forcefully argued that Chinatown's reputation as a place with "foul spots" and "evil smells" had been permanently driven into the "Eastern" mind. Commercial centers and cities competing with San Francisco doggedly ignored recent favorable public health reports and continued to spread false rumors about the dangers of its Chinatown.[100]

Without reference to San Francisco, Wyman himself strongly advocated for a "slumless" America, insisting that adequate air, pure water, and sunlight not only improved human health but also reduced criminality. He was careful, however, to acknowledge the property rights of tenement owners, suggesting that, depending on local circumstances, they must be compensated for their improvements. Tenants, however poor, should also receive financial support. Wyman believed that it was wiser to defer evictions until provision could be made for comparable housing elsewhere: "Municipalities can well afford to pass ordinances for the destruction or reconstruction of unsanitary dwellings with a proviso for a possible delay of execution until proper quarters were provided." The surgeon general argued that difficulties in this regard could be overcome by "shrewdly and fairly" manipulating the political will.[101]

Schmitz's health board joined such rhetoric by "unqualifiedly" approving "the removal of Chinatown from its present site in San Francisco to some outlying and isolated district." Pending a complete expulsion, inhabitants of the district could be legally evicted from all underground tenements not accessible to light and air. Another resolution offered the services of the board's attorney to advise about all necessary procedures to accomplish the planned extraction without delay. A new Chinatown location would allow the enforcement of strict sanitary regulations and even quarantine if circumstances warranted it, "without prejudice to local interests."[102]

Commenting on this call for eviction, the *Chinese Western Daily* briefly reviewed the history of the problem, acknowledging that since the 1880s Chinatown's location in the center of San Francisco had made it a prime target for removal. Following the example of Honolulu, efforts to eject the Chinese were conveniently linked to the presence of plague. So far, this strategy had repeatedly failed in San Francisco because of Chinatown's prominent role as an international trade center; if destroyed, transpacific commerce would be seriously disrupted. However, the Chinese were certain that nothing would stop the city's majority: the defeat of successive eviction efforts only seemed to fuel racially motivated hatred. The forgone conclusion was clear: "Unless we clean the streets of Chinatown and deny Caucasian men all their excuses, Chinatown's relocation is inevitable."[103] "Fellow countrymen" were told to be careful and avoid providing excuses for piecemeal demolitions.

Yet San Francisco health officials persevered; their strategy now focused on partial instead of total destruction. Buildings said to be too dirty to be cleansed with antiseptics would be torn down, since the Chinese seemed incapable of keeping them clean.[104] By the middle of summer, Regensburger, Foster, O'Brien, and Hassler met with Rupert Blue to discuss plans for rebuilding parts of Chinatown already destroyed by city crews. Ready to renovate, property owners were encouraged to submit plans for the structures they intended to erect on the destroyed sites. Swamped with requests, city and state officials were forced to set specific requirements before issuing new building permits.[105]

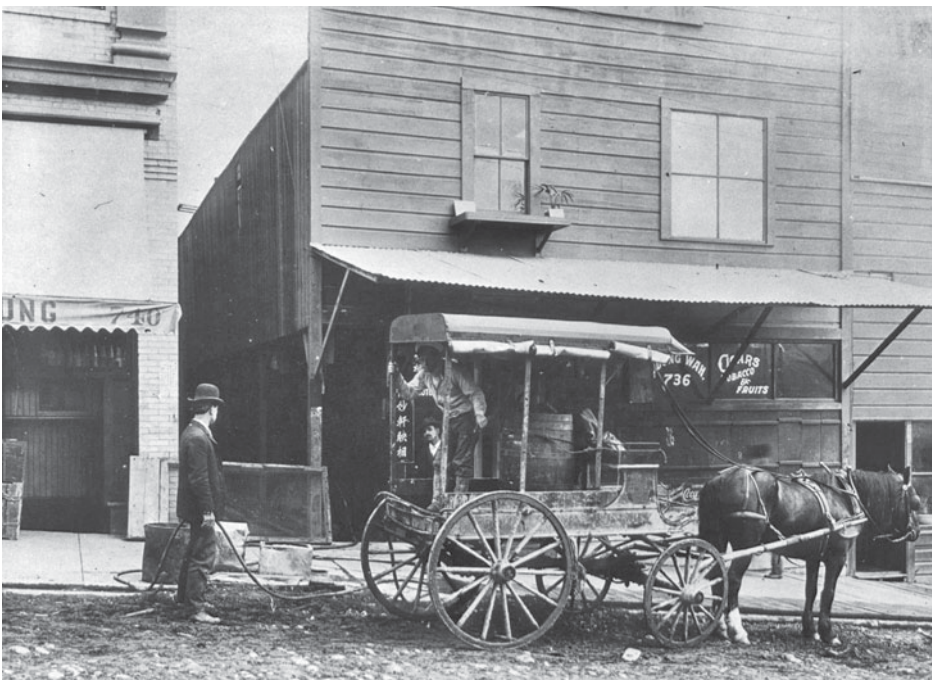
Chinese Cooperation: Joint Sanitary Inspections

While a more assertive U.S. Public Health Service sought to apply pressure on California with the help of other states, sanitary work in Chinatown proceeded with now-familiar routines. Assistant Surgeon Donald H. Currie, who had

worked largely in the laboratory conducting autopsies and bacteriological studies, now also visited sick Chinese reported by the loyal Wong Chung.[106] Assistant Surgeon Bolivar J. Lloyd, Currie's colleague, helped with autopsies and laboratory work. He also had his own interpreter and tried to locate and examine unreported cases. For his part, San Francisco assistant health officer Frank P. Wilson visited all the sick reported to Currie with the help of Howard Morrow, the new city bacteriologist.[107] Relations remained amicable; together, federal and local health officials screened all potential plague cases.[108] Early in February 1903, Arthur Glennan, Matthew Gardner, and Michael Casey met to discuss a preliminary plan for the eradication of plague in Chinatown. Gardner pledged $10,000 in state funds for plague prevention expenses,[109] including salaries for three medical men, two sanitary inspectors, and two Chinese interpreters. Glennan, who had requested that Rupert Blue return from Milwaukee to assist him, insisted that all inspections be supplemented with the "wholesale destruction" of rats despite press reports of a "rat-infection humbug."[110] The San Francisco Health Board selected Hassler to supervise targeted demolitions, and medical inspector Carleton Mathewson was put in charge of disinfections. Both were recent Cooper Medical College graduates hired by the city. Three sewer workers began setting poisoned traps, and bounties were offered for rats discovered in Chinatown. Concerns about the impact of phosphorized oil and arsenic on the Bay's fish stocks prompted an inquiry to the U.S. Fishing Commission, but no poisoning was detected.[111] The city promised to sweep the district's streets three times a week, also flushing them weekly with water. Extra efforts would be made to remove garbage, especially from Chinatown's clogged back alleys.[112]

The health board also agreed to recommend to the Board of Public Works and Board of Supervisors that a section of Dupont Street from California to Broadway be paved with bituminous rock placed over the cobblestone foundation for easier cleaning.[113] Casey also agreed to immediately sanitize all infected places and force their renovation. Federal officials committed themselves to supervise all activities and furnish laboratory services and Chinese interpreters. Instructions would be given at the Public Health Service's headquarters and laboratory at 641 Merchant Street.[114] With backing from the Mercantile Joint Committee and health board president Casey, "the contentions of the past few years have dissipated."[115] To the chagrin of Mayor Schmitz, Casey had forged an alliance with Supervisors D'Ancona and Brandenstein, who were members of the Hospital and Health Committee, thus significantly diminishing the powers of the mayor in health-related affairs and preventing potential interferences.[116]

The Board of Supervisors quickly adopted this plan and appropriated $2,500 to begin the sanitary work, which was estimated to last for at least a year: "Everything that sanitary science can suggest and money can do is being done to put Chinatown in a healthful condition."[117] Workers once more coated the district with chemicals, although household goods were increasingly subjected to steam disinfection instead of being burned. They soaked buildings and cellars with chloride of lime and carbolic acid, and they washed walls and floors with the standard solution of mercury bichloride and lye. Once again, the scene of white lime powder drifting through the streets conveyed a wintry image. Between early February and May 1903, 26,000 pounds of lime chloride, 1,000 gallons of carbolic acid, and 360 pounds of bichloride of mercury were dumped on the neighborhood.[118] According to officials, this onslaught (undertaken with no concern about long-term consequences for



Cleaning operation in Chinatown. Horse-drawn pump wagon with workers spraying disinfectants into a lodging house, 1900s.

Citizens Health Committee, *Eradicating Plague From San Francisco,* prepared by F. M. Todd (San Francisco: C. A. Murdock, 1909), National Library of Medicine, Images from the History of Medicine, A015957.

human residents) seemed to drastically eliminate "vermin," presumably including rat fleas, their eggs, and their larvae.

Yet the key to success resided in the leaders and residents of Chinatown. Yee Fun, secretary of the Six Companies, confirmed a verbal agreement reached at a previous meeting with representatives from various San Francisco mercantile organizations. The Chinese formally pledged to assist all local, state, and federal health authorities in their future sanitary work. Their agents would accompany inspectors on visits through Chinatown. If family or friends denied access to sick people, Six Companies officials would use their influence to accomplish the desired examinations.[119] The Six Companies also decided to prepare and distribute a small pamphlet to the population written in both Chinese and English, asking people to comply with the cubic air ordinance. In fact, the organization sent its own officials through the neighborhood to measure rooms and determine how many people could live in particular tenement houses without violating the law. Printed notices with the required space volume were posted on the door of every living space in Chinatown.

Chinese leaders also joined in urging residents to keep their rooms in better sanitary condition. While it had been difficult to make the laboring class understand the rationale for sanitation, "every influential Chinese merchant is doing his best to assist in this purification," observed a local newspaper.[120] A long red sign posted outside the headquarters of the Six Companies urged everybody to clean up.[121] Such efforts from the local Chinese leadership were not surprising. After years of uncertainty and periodic sanitary raids, the long-suffering merchants welcomed improvements in the increasingly dilapidated district they were forced to share with the laboring population. Clearly, for the Chinese, the joint cleaning campaign was a preferred alternative to total removal; it promised better living conditions for all. Above all, a more attractive Chinatown was good for relations with other neighbors and businesses; it could also attract tourists.

Fanning such hopes was the arrival in San Francisco of the new Chinese minister, Liang Chen, successor to Wu Tingfang. Liang, described as a "pleasant and affable" Cantonese who spoke fluent American English, had graduated from the Phillips Academy in Andover in 1882 and was well acquainted with American politics and culture. He brought greetings from Ho Yow, now living in Hong Kong, and revealed that San Francisco would soon see the return of Acting Consul General Chow Yu Kwan, presently stationed in Cuba. The somewhat assimilated Liang, accompanied by an entourage of secretaries and assistants, expected

to stay at his Washington post for about three years. He declared that relations between China and the United States "are now very friendly" and that his duties in Washington would be light and pleasant. There was no further trouble with the Boxers in the north of the country. "I am hoping for better things in the commercial relations between the two countries," affirmed Liang. Like Ho Yow before him, he wished to establish a new trading company. In his view, Chinese markets were ready to receive American imports with the aid of Chinese merchants.[122]

In spite of the efforts by their leaders, ordinary Chinatown residents remained defiant and distrustful of outsiders. As Blue reported, the "Chinese race with few exceptions remained secretive and superstitious," placing obstacles in the way of searches for sick people.[123] As the joint inspection started in February, the Chinese once more felt imprisoned in their district, especially since policemen accompanied health officials on their rounds. For greater efficiency, Chinatown was divided into different sections, with each street block carefully mapped, its buildings marked, and each "compartment" and room numbered. Photographs determined the condition of houses and served as evidence for planned demolitions. A systematic census of residents followed, including name, age, and occupation, to allow close monitoring of all residential movements, especially among seasonal workers. With around-the-clock surveillance, two inspectors assigned to each building checked for resident evasions, concealments, or flights.[124] Between February 10 and April 30, all buildings in Chinatown received at least two complete visitations. During such a house call, the examiner monitored sanitary conditions and inquired about the tenants' whereabouts. The information was carefully entered into notebooks employed for analysis and future verification. In this slow but methodical way, officials gradually managed to track the movement of most Chinatown dwellers, improving chances of finding cases of sickness.[125] The first obvious result was a significant decrease in autopsies, because medical inspectors became familiar with the clinical evolution of many sick inhabitants well before their demise.

Surviving residential inspection logbooks reveal the scope and detail of Chinatown's surveillance. Some documents were arranged by street location; others listed alphabetically the names and occupations of residents.[126] "Idle" and "beggars" alternated with cooks and laborers, even a fair number of Chinese physicians. In some buildings, the inspectors counted rooms, bunks, and present and absent residents and indicated if the facilities had other exits to adjoining houses with street entrances. Observers also took routine notes about the condition of

water closets, flushing toilets, kitchen sinks, and leaking drain pipes. Contrary to earlier accounts, there were usually two bunks per room, always enough for all registered renters, perhaps a consequence of previous efforts to enforce the cubic air ordinance. Nearly half of the occupants were listed as absent, attending to their jobs inside or outside the district.[127] Another interesting aspect of this informal census appeared to be the growing presence of families with children, as aging bachelors died or returned to China.[128] By this time, nearly 10 percent of inhabitants were American-born. Perhaps fearing eviction before the demolitions, about six hundred passengers sailed back to China in early December onboard the steamer *Lothian*, the largest contingent—presumably mostly bachelors—ever to leave together for the "Flowery Kingdom."[129] Chinatown's population was definitely shrinking and changing in character.

Two of the most prominent officials involved in this detailed inspection system claimed that over time the Chinese gradually ceased to consider the systematic visits as hostile "invasions." By opening living spaces to more air and sunlight and removing refuse, sanitarians offered residents a new level of comfort. Merchants were grateful for the new influx of business. State health board secretary Foster, for his part, observed that the Chinese "were not obstructing so much" as in earlier campaigns; their increased cooperation suggested a degree of acculturation and an appreciation that their lives were being respected.[130] Hassler suggested that routine, largely involuntary contacts between the same people—Chinese residents and visiting health officials—created opportunities for mutual tolerance. He even claimed that some Chinese "cheerfully" opened their doors each morning and invited medical inspectors into their houses.[131] Renters were relieved at the prospects of not having to pay for repairs and removal of garbage. No civilization is monolithic; perhaps San Francisco's Chinatown was beginning to lose some of its rigid cultural and social conservatism, proclaimed the *San Francisco Chronicle*.[132]

As the cleaning proceeded, Chinatown's image as a place of extreme filth and degradation began to fade. At the Tung Wah Dispensary, the current Western medical staff began working more closely with a cadre of distinguished local consultants, forging a more amicable relationship with the local health board and members of the Public Health Service.[133] The attitude contrasted sharply with the contentious dealings during the George L. Fitch era. In fact, the presence of such professionals testified to the increasing acceptance of Western medicine and its treatments among sectors of the Chinese-American population,

while preserving for Chinatown residents the option of consulting their own practitioners.[134]

Supporting the notion of a successful sanitary campaign was the paucity of new plague cases in the district despite elaborate inspections. By the end of the year, federal officials reported only sixteen new official deaths from the disease, seven occurring among non-Chinese. Two of the fatalities were Italians living near Chinatown,[135] prompting authorities to widen the perimeter of their sanitary activities to include the Latin Quarter and nearby Japantown. The Chinese had argued for years that they were being unfairly singled out; other San Francisco neighborhoods also lacked sanitation. More importantly, the theory of racial susceptibility to plague came to be questioned. Yet the deaths of three Chinatown residents in November suggested the need for further inspections and disinfection.

Sanitarians Claim Victory

1904–1905

> We, Chinese and Westerners, should patiently wait for each other's news. One day, when harm is eliminated, we shall again settle back into a peaceful existence. Hopefully, the answer to our predicament is near, and then, all of us, Chinese and Westerners, will together find a new spring.
>
> —POEM IN *CHINESE WESTERN DAILY* (JUNE 7, 1900)

Puppet Show: San Francisco's New Health Board

After replacing Surgeon Arthur H. Glennan at the helm of the U.S. Public Health Service in San Francisco in May 1903, Rupert Blue kept a keen eye on the political developments in the city and their potential impact on the joint sanitary venture being conducted in Chinatown and its immediate borders. To everyone's surprise, Michael Casey had turned out to be a reliable, can-do partner. A savvy labor union leader, Casey skillfully combined the feeble post of Health Board President with the more robust leadership of the Board of Public Works, entrusted with essential services and provided with ample resources. Supported by former mayor James Phelan's health board appointees and the Hospital and Health Committee of the Board of Supervisors, San Francisco's contribution to the inspection and cleaning campaign had already reached $9,000 by October 1903,[1] provided from an "Urgent Necessity Fund."[2] Mayor Eugene Schmitz only reluctantly signed the appropriation after being persuaded that state and federal authorities were carrying the brunt of the cleanup costs. Wrecking operations would be completed in March, but inspections, disinfec-

tion, and rat killing could last for an undetermined period of time. The uneasy mayor kept insisting that the law clearly required property owners to assume such financial burdens.

Given Schmitz's aversion to the anti-plague operation, the Public Health Service officers worried about the effects of his probable reelection. Because of foot-dragging on sanitary matters, the mayor appeared to be popular in Chinatown. He attended several rallies in the district, handing out his red campaign buttons; wags pointed to the love for graft Schmitz and the Chinese shared.[3] As always, Surgeon General Walter Wyman demanded to be fully informed about the political mood, and Blue complied, sending him more confidential letters. Terms for the remaining Phelan appointees, Rudolph W. Baum and Vincent P. Buckley, were about to expire, as were those for health officer Aloysius O'Brien and city bacteriologist Howard Morrow. William B. Lewitt was expected to resign rather than submit to a new regime. Under civil service rules, only chief inspector William C. Hassler was safe, but not all seemed lost. Blue revealed that Mayor Schmitz's three health board appointees, Ward, Stinson, and ex-officio police chief George Wittman, were also in favor of demolitions in Chinatown.[4]

Following Schmitz's reelection, achieved in part by exploiting anti-Chinese sentiment—he smeared his Democratic opponent for employing a Chinese cook—Blue managed to schedule a meeting with the mayor on Christmas Eve 1903. N. K. Foster, secretary of the state health board, also attended. Both men persuaded Schmitz that the sanitary campaign needed to continue beyond the February 14 deadline the mayor had proposed. The state health board had already passed a resolution that the work would continue until summer. Although still dismissive of the plague diagnosis, Schmitz was willing to sign warrants if the supervisors continued to provide the funds. For their part, Supervisors Arnold D'Ancona and Henry U. Brandenstein from the Finance and Hospital and Health Committees assured Blue that whenever needed, funds would be forthcoming to pay for this work.[5]

A few days later, the mayor appointed James W. Ward, the homeopathic physician, as health board president. Also reappointed was J. Coplin Stinson, a Canadian surgeon for the Pacific Sanitarium and good friend of Schmitz. New members were John V. Hughes and Joseph T. Poheim, both Cooper Medical College graduates, as well as William A. Harvey from the St. Louis College of Physicians and Surgeons. In addition, the board acquired another ex-officio member, Herbert Schmitz, president of the board of public works and brother of the mayor, while Wittman remained chief of police. The city health officer

replacing O'Brien was Dennis F. Ragan, also a Cooper Medical College graduate. Oddly, Frederick G. Canney from the New York Homeopathic Medical College became city bacteriologist.[6] None of the appointees had affiliations with the University of California Medical Department or expressed any interest in sanitary science.[7] A day later, acting on instructions from Mayor Schmitz and his attorney, Abe Ruef, the new health board declared every departmental office vacant. In a clean sweep, nearly all former employees were removed, including those in posts held under the civil service law. To evade the statutes, Schmitz nominees were given new designations without changes in duties. Ragan, formerly a member of the board of education, not only became San Francisco's health officer but also took over the duties of board secretary, without additional salary.[8]

Ward explained that the reorganization was a strategic retrenchment designed to offer more efficient service and save money. By his estimate, the entire health department would spend at least $30,000 less per year. Among the positions to be abolished were the offices of secretary and assistant secretary, statistician, assistant chemist, toxicologist, chief sanitary inspector, and plumbing inspector, together with six assistant sanitary and four food inspectors. In their place, a deputy health officer and three district health officers would work at reduced salaries. Hassler was among the few retained, now becoming chief inspecting physician instead of retaining his title as chief sanitary inspector.[9] The so-called retrenchment was a euphemism for naked patronage and involved nearly two-thirds of all municipal employees, especially those working at various municipal hospitals and the almshouse.[10] An entry in the Public Health Service's laboratory log commented that Schmitz's selections were puppets, expected to faithfully execute the mayor's policies.[11] The health board was living up to the code word employed since 1900 by federal health officers in their telegraphic communications: "burlesque."

Reacting to the abolition of civil service positions, San Francisco's Board of Supervisors immediately passed two resolutions. The first declared that although supervisors were in favor of government efficiency and would support the consolidation and abolition of offices to achieve that goal, only lawful methods were acceptable to prevent a violation of civil service provisions of the city's charter. The Finance, Civil Service, and Hospital and Health Committees were directed to investigate the actions of the health board and determine their legality. Supervisors D'Ancona and Samuel Braunhart suspected that the Schmitz administration was violating existing rules, a criminal offense

that demanded the removal of all responsible officials from office. The press alleged that Schmitz had deliberately and openly disregarded the city's civil service provisions, brazenly populating his government with friends and cronies. To achieve his political goals, the mayor used the health board, "a collection of marionettes" operated by Schmitz and Ruef. Bypassing the regulations through the creation of new positions could spread to other city departments, creating an autocratic form of government operating above the law.[12]

The imminent confrontation between the Schmitz administration and the Board of Supervisors created a potentially serious problem for the Public Health Service in San Francisco, still actively engaged in conducting the sanitary campaign in Chinatown. The supervisors demanded evidence for Schmitz's "retrenchment" plan, looking for a reduction in the salary roll, although resources would still be provided for sanitary work.[13] Blue sought reassurances from the mayor and board president Ward that the joint operations would not be interrupted. In the meantime, however, Hassler, now Ward's chief adviser and leader of the wrecking crew, was forced to reduce the demolition team to five men and kept only two disinfecting crews in Chinatown.[14] Subsequent hearings held by the supervisors' investigative committee produced high drama but few results.[15] D'Ancona repeatedly clashed with Abe Ruef, acting as the mayor's alter ego, who strenuously defended the dismissals as necessary to reduce the bloated and politicized municipal workforce. Forced to testify, Ward tried to be cautious and evasive, but his testimony confirmed suspicions that both Schmitz and Ruef were personally involved in the selection of new employees—all political friends—fully aware that such a reorganization violated civil service rules.[16] An embarrassed Ward was also forced to admit that he had not attended a single board meeting for the last eight months and had missed all committee sessions during his entire eighteen-month incumbency. The proceedings took on elements of a theatrical farce, in part because of the antics of Ruef, who attempted to silence witnesses, delay the hearings, and stage dramatic walkouts.[17]

Federal sanitarians found themselves in the middle of an escalating fight triggered by a corrupt municipal administration poised to govern with little opposition for the next two-year term.[18] Since another case of plague had been confirmed a week earlier, Blue appeared before the supervisors' Finance Committee to explain future needs of the joint cleanup in Chinatown. At the same time, Schmitz's health board appealed for another $12,000 appropriation, drawing objections from D'Ancona because the unit still showed an unexpended balance and could achieve further savings through its much-publicized

reorganization.[19] After much discussion, the supervisors relented and approved an additional $2,000 as a final payment to finance the work.[20] Future clashes to sustain the sanitary campaign loomed.

Unexpectedly, D'Ancona managed to pass a resolution that gave the Public Health Service total control over future cleanup funds authorized by the supervisors, estimated at about $2,500 per month. This included the power of hiring and discharging wreckers and disinfectors.[21] The supervisors' obvious intent was to continue supporting the federal service and address its needs through an unprecedented decision to bypass the health board. The idea was to prevent Schmitz's appointees from spending the monies on salaries for newly hired cronies, a traditional San Francisco practice.[22] In fact, when the supervisors' investigative committee issued its final report, it recommended stopping payment of salaries for political nominees and demanded the removal of all health board members.[23]

After consulting Ward and Hassler, Blue agreed to the unusual offer, reassuring Wyman that the city health board would continue to cooperate, although its members and the mayor were not dependable partners. In fact, there were doubts about whether the board would even acknowledge three recent plague deaths. Given the current tensions between supervisors and Schmitz's health board, the new funding provision was the only way to obtain sufficient resources for sustaining the cleanup.[24] A week later, Blue apologized to Wyman for creating the impression that he was actively meddling in local politics, particularly since the new arrangement with San Francisco's supervisors included the power to hire and fire laborers. Traditionally, supervisors and the health board competed to place their own protégées on the payroll in a "shocking display of bossism."[25] Blue assured Wyman that he would retain honest and efficient workers instead of yielding to grafting. Yet his first action, opposing the firing of an efficient foreman from the Board of Public Works in favor of a crony, stirred up conflict.[26]

Out of loyalty to Schmitz, Ward hesitated to embrace the notion that plague was present in San Francisco until the death of three Italian patients in February. An attempt to have the mayor reintroduce the publication of a monthly bulletin with vital statistics failed; Schmitz still dreaded mentioning plague, as it would harm San Francisco's reputation and economy. In late May, the service confirmed a total of nine additional plague cases, five of them non-Chinese. None, however, had been reported since the end of February. Blue was "particularly gratified" and believed that the disease was on the wane because of

extensive sanitary efforts since the previous year.[27] Lacking knowledge and resources, city bacteriologist Canney—the homeopath—declined to carry out his own studies, announcing that he would rely on federal officers and their bacteriological results. Canney acquired instant notoriety when he suggested that San Francisco women shorten their skirts since they were germ catchers; he predicted that this fashion reform would lower San Francisco's disease burden by 25 percent.[28]

Since Wong Chut King's death in March 1900, the spasmodic occurrence of plague cases in Chinatown had created sufficient impetus for launching multiple cleansing operations. By early June, however, with no further reports of the disease, Ruef urged Blue to complete his work as soon as possible and depart.[29] A temporary truce between the Schmitz-Ruef faction of municipal government and the supervisors' Finance Committee helped the Public Health Service to continue navigating the tricky shoals of patronage.[30] Preaching caution, Blue wished to delay the expected completion of the work until the end of the year. But charges of municipal corruption kept bubbling up, casting shadows on the city's leadership. In July, the health board fired several physicians and food inspectors and used their salaries to increase the paychecks of its favorite health and deputy health officers.[31] On December 1, Mayor Schmitz, Ruef, and Chief Wittman were charged with bribery. A raid in Chinatown had interrupted an illegal gambling operation, disclosing that the owners were routinely collecting funds to pay off police officials.[32] Although Schmitz tried to squelch the inquiry, a wider probe and grand jury investigation into police corruption in Chinatown eventually led to the firing of Wittman. Among the witnesses was Rupert Blue, called to testify about conditions in Chinatown. His earlier concerns about being drawn into local politics were realized, although his factual report managed to avoid further antagonism.[33]

Dawn of a Public Health Fraternity

While relations with San Francisco's health officials, and particularly Mayor Schmitz, remained tenuous, Governor Pardee and his state health board became steady partners in the sanitary campaign in Chinatown. Based on information obtained from the district's inspectors, Secretary Foster proposed to extend the work to Chinese neighborhoods in other California cities because of the frequent travel between localities. Health boards throughout the state would be contacted; if the cause of death was obscure or suspicious, autopsies of all

persons dying in these districts needed to be performed. Officials were told to forward all available tissue specimens to the Public Health Service laboratory in San Francisco. In the event that plague was diagnosed, Foster pledged to warn local health boards immediately and demand sanitary measures to eradicate the infection.[34] To better serve the interests of the state, California vowed to establish its own laboratory for food examination and bacteriological investigations.[35]

While the Schmitz health board remained under investigation by the supervisors, Blue tried to focus on the campaign against plague, organizing a meeting of federal, state, and city health officials at the service's headquarters and laboratory. Chaired by President Regensburger of the state health board, the conference also included Supervisor D'Ancona and Frank J. Symmes, president of the Merchants Joint Committee. On the agenda was the current sanitary situation in Chinatown and whether the previous cooperative plans needed to be revised in light of personnel changes at the San Francisco Health Board. Blue later characterized the discussions as "harmonious throughout," with no apparent differences of opinion emerging about the overall direction of the sanitary operation in progress.[36] Current combined expenditures in Chinatown were expected to reach $57,000 per year. The city was now spending on average $3,850 per month for demolitions, garbage removal, and purchase of disinfectants, with labor costs representing the largest expenditure. At this point, the State of California only contributed $900 per month, all earmarked for inspections. Symmes objected that San Francisco should not be forced to pay the lion's share since it paid a third of California's taxes, with some of the money going into the state's $100,000 emergency fund for protection against contagious diseases.[37] In the end, the group pledged to hold similar consultations every two weeks for an indeterminate period. A binding resolution vowed to continue all sanitary measures adopted in February 1903 for as long as necessary to achieve the goal of a plague-free city.[38]

For the next two months, the biweekly conferences conducted at federal headquarters in San Francisco became an oasis devoid of "acrimonious debate" in the midst of local political turmoil. Those attending the sessions treated each other with respect. Despite occasional tiffs between city and state leaders over the division of expenses, collaboration prevailed, and even members of the embattled health board recognized the group as a convenient forum for discussing "extraneous matters." In sharp contrast with previous, failed efforts to bring politicians, merchants, and physicians together, Blue, his authority bolstered by the

perception of a much more powerful federal partner, seemed masterful at his task of mediator, patiently listening to all sides while trying to keep the ultimate objective of the campaign front and center during the discussions. His highest priority was to cover all ground floors in Chinatown with concrete, thus rendering them rat-proof.[39] Initially perceived as "a set of liars," the group was able to work together and pointed the way for other organizations to join forces in tackling public health issues.[40]

Another venue for bringing sanitary matters to the attention of professionals involved in public health was the second annual meeting of California health officials, held in Paso Robles in mid-April. About forty officers attended the conference from counties and municipalities to hear state health board secretary Foster discuss the state's sanitation needs. Without mentioning plague, he was emphatic about the importance of health in the context of traditional American aspirations to "life, liberty and the pursuit of happiness." Yet strength and health were qualities lacking in filthy and unsanitary environments, and therefore "there is no duty more pressing and necessary than the preservation of health." Without mentioning Chinatown, Foster linked squalor, disease, and crime, repeating the economic argument that good health prevented the need for spending vast resources to deal with crime and punishment. After studying the sanitary laws of California for a year, Foster considered them "entirely inadequate" for the needs of the state; based on antiquated scientific knowledge, they were useless. To make matters worse, the state health board's functions remained advisory; it held few enforcement powers. Foster urged his colleagues to get involved in politics and seek positions in the California legislature to write and pass new sanitary laws.[41]

Shortly thereafter, Blue's biweekly gathering in San Francisco evolved into a permanent organization, the Public Health Commission of California.[42] At the inaugural meeting, Blue, Donald Currie, and Hugh S. Cummings represented the service; Martin Regensburger, Foster, and F. G. Ainsworth, the California State Health Board; and Ward, Hughes, Poheim, Stinson, Ragan, and Hassler, the San Francisco Health Board. Symmes participated on behalf of the Merchants Association. Rupert Blue was elected president; Regensburger, first vice-president; and Ward, second vice-president. Deputy San Francisco health officer Louis Levy became secretary, with Governor Pardee and Mayor Schmitz tapped as ex-officio members.[43] The all-inclusive roster of attendees and well-balanced selection of officers spoke volumes about Blue's leadership and tact. The purpose of the new commission was to help in the formulation, interpretation, and

imposition of sanitary regulations. Instead of working independently of each other, members would have the opportunity to come together to frame legislation and determine enforcement.[44]

On June 3, the Second Annual Conference of State and Territorial Health Officers with the U.S. Public Health and Marine Hospital Service opened in Washington, DC, with representatives from twenty-two states attending. Wyman, who once more presided, explained that the service's relationship with state health boards provided national scope and gave an international dimension to its role. The object was not only the exclusion and suppression of notorious epidemics; greater attention would henceforth be directed toward lesser diseases and their prevention. Rather than quarantine, detention camps, and sanitary guards, the service wished to focus on the need for air and sunlight, the provision of clean water, and safe waste disposal. In a resolution, delegates expressed confidence in current antiplague measures being implemented in Chinatown. Federal, state, and municipal authorities were congratulated for their "harmonious action." Wyman asserted that "the relations of the Service with the California State Health Board were now more intimate and cordial than ever."[45] In his conclusion, the surgeon general boasted that the Public Health Service "has fairly entered upon its functions as the national health organization," one of his most cherished objectives. In an unusual gesture, he credited this success to his "well organized, disciplined and commissioned medical officers."[46]

Foster, speaking first during the ensuing roll call, provided a cogent summary of the plague situation in California. He also emphasized that the sanitary work was being "vigorously pushed in perfect harmony" with all plague cases fully reported. As an "auxiliary" aid, the California Public Health Commission operated with input from health boards and mercantile associations. These organizations all recognized the importance of improving sanitation and restoring confidence throughout the country. "We are prepared for a few more [plague] cases but we feel that we are on the right course and shall continue it until epidemic plague will be impossible. Constant watchfulness must be our motto."[47]

At the end of June, San Francisco Health Board president Ward issued a report of the health department activities for the fiscal year 1903–4. Taking a page from his federal and state colleagues, Ward also spotlighted the "spirit of cooperation" embodied in the creation of the California Public Health Commission: "The energy manifested has been genuine as to stimulate the Health Department to aid to the utmost the building of strong barriers against disease,"

read the report. For Ward, the bimonthly meetings proved especially valuable. Working under the shadow of an unpredictable mayor, this "irregular" physician became part of a congenial group that not only respected his professionalism but also fostered the exchange of ideas, giving each member the opportunity of seeing matters approached from several viewpoints.[48]

The issue of urban sanitation gained momentum not only in San Francisco. It came to permeate the national labor union movement. At the annual meeting of the American Labor Federation in San Francisco in November 1904, the convention passed a resolution making sanitation an important issue in labor politics. Unions were urged to support candidates who would pledge support for ordinances that facilitated better health conditions and material prosperity at all levels of society. In early 1905, speaking before the New York County Medical Society, Wyman similarly emphasized that health was important for the advance of individual happiness and national, state, and city welfare. One of the first duties of municipalities was to bring good drainage, paving, water supply, and correct tenement-house construction to portions of their cities that were currently neglected and therefore "imperiling the health and happiness of working people."[49] Because Chinatown had "now passed into a comparatively sanitary state through the united efforts of the federal, state and municipal boards of health," the San Francisco Health Board adopted a unanimous resolution in mid-February 1905. For almost a year, the authorities had not reported a single new plague case. "Our thanks be extended to Dr. Rupert Blue for his skilful and energetic cooperation in all that has pertained to the welfare of San Francisco's high sanitary state and commercial prosperity."[50]

At the Third Annual Conference of State and Territorial Health Officers meeting at the New Willard Hotel in Washington, DC, on May 15, 1905, Secretary Foster announced that the California State Legislature had approved new public health laws. The reorganization gave the board control over all public state buildings, and it allowed for the preparation and distribution of antitoxins and vaccines as well as approved sera. In the future, all local boards of health would need to enforce state quarantine regulations and report all infectious diseases, local epidemics, and violations of state health laws. Addressing Chinese practices, the board became involved in establishing and enforcing regulations for the embalming, cremation, burial, disinterment, and transportation of remains.[51] A resolution concerning the eradication of plague from California expressed satisfaction with the methods and the results obtained through "united and harmonious efforts of the U.S. Public Health and Marine Hospital

Service and local boards of health by means of rat extermination and intensive sanitary improvements throughout the affected area."[52]

Foster again reviewed the political process of the past two years at the thirty-fifth annual meeting of the California State Medical Society in Riverside. Instead of faulting members of the previous Gage-appointed state health board, Foster excused their inactions because of lack of authority and personnel. Following Pardee's election, however, the danger of a federal quarantine had become the new board's most urgent task. Fortunately, state health officials throughout the country deferred quarantine measures, allowing California the opportunity to demonstrate its willingness to cope with the epidemic. The Public Health Commission planned to organize yearly meetings, allowing members to confer and share their experiences. While costly and protracted, the plague outbreak in Chinatown clearly exposed the need for further public health legislation to empower local health boards and allow them to accomplish their goals. Several bills were successfully introduced and passed by the California legislature, including a comprehensive system of vital statistics, a clean water act, the abatement of nuisances, powers for inspections, quarantines, and disinfection, and rules for disposal of the dead. After fourteen months without a reported plague case, Foster and other California health officials felt confident that the disease had been stamped out.[53]

Targeting Rats: Poisons and Demolitions

Modest efforts to kill rats through the placement of poisoned bait in Chinatown's sewers were first implemented in the spring of 1900, during the second quarantine and vaccination fiasco. In late 1901 and then again in April 1902, Assistant Surgeon Mark J. White resumed these practices together with a rat-catching program. Then, in February 1903, after Glennan successfully negotiated the joint anti-plague campaign and Rupert Blue returned to San Francisco, rat destruction became the central objective of the anti-plague program. The plan was based on mounting scientific evidence that these rodents were primary carriers of the disease and thus responsible for human infections.[54] With the help of several men and dozens of traps, Chinatown sewers were rebaited with bits of cheese laced with phosphorus, spread on grooved boards lowered into sewers beyond the district's inner perimeter. Arsenic eventually replaced phosphorus as the key ingredient in the preparation of bait. Although few rats were seen and only a small number captured, the program was judged a success,

although many wondered whether the rodents had simply been driven away by the smell of carbolic acid generously applied in basements, alleys, and rooms.[55] As of May 1903, according to Blue, three hundred rats trapped in Chinatown had failed to show evidence of plague.[56] The demolition of dilapidated wooden structures, primarily aimed at providing light and air to existing structures, also removed rotted planks and dirt, eliminating rat nesting and breeding places. Because of the generous employment of disinfectants in the district, workers noticed a diminution of "vermin," such as insects, flies, and fleas.[57] This result melded the expected effects of traditional antimiasmatic disinfecting with the still unproven notion that fleas were the intermediaries in the transmission of plague.

Blue's attention to the movements of rats rather than people suggested that the current sanitary campaign was probably inadequate, being focused on the single district of Chinatown.[58] The death of two non-Chinese residents from plague in the summer of 1903, a German blacksmith from Martinez and a Canadian bridge builder from Danville, triggered further inspections of East Bay towns, but no infected rats could be discovered. In the fall, however, reports of a massive wild squirrel die-off in southern Contra Costa brought Blue back to the area, determined to procure some susceptible animals and subject them to inoculation with plague. Once again, the investigation seemed to lead nowhere.[59] By early 1904, the federal officer redoubled his efforts in Chinatown, enlarging the perimeter within which traps with poisoned bait were placed, while distributing "Danysz virus" mixed with cornmeal to be planted above ground in dwellings and warehouses.[60] Named after its discoverer, Jean Danysz, director of the Laboratory for Agricultural Microbiology at the Pasteur Institute, this microorganism had been isolated in 1893 during an epidemic affecting wild voles in France; it was found to be lethal when infecting mice and rats but harmless to humans and other animals. By this time, the microbe—later found to be a strain of salmonella bacteria—came to be widely distributed in Europe as "Pasteur virus" in the early 1900s. Grown in broth, it was sold over the counter as an extract to be dissolved and sprinkled on grain for bait in households, warehouses, and docks. Subsequent experiments confirmed its efficiency in killing rats.[61] After examining all forms of rat destruction, Blue's colleague, Assistant Surgeon Currie, decided to use a combination of methods, including the slow poisoning with chemical substances such as phosphorus and arsenic, mixed with rye bread, meat, or fish. This approach had the advantage of not frightening rats away because of sudden deaths. The Danysz virus could contaminate entire

rat colonies, triggering a progressive and massive epizootic that could drastically diminish Bay Area rat populations.[62]

Ultimately, however, the objective was to create permanent barriers between rats and humans through a systematic ratproofing program. Among Blue's early targets were rat-infested cellars around Chinatown's Fish Alley and the Jackson Street Theater, a suspected hub for plague-infected rodents. At this time, Blue and Hassler were in charge of singling out unsanitary structures, especially decrepit porches and backyard shacks suspected of harboring large numbers of rats. After such a building was reported, the health board promptly voted on a condemnation citation to be sent to the property owner, demanding immediate repairs or threatening destruction. Although some owners still attempted to delay or refused to comply with such notices, many eventually consented to the municipal intervention. With targeted premises quickly vacated,

Chief Inspecting Physician William C. Hassler's wrecking crew in Chinatown, early 1900s.
Williamson album (author's collection).

Hassler's crew went into action.[63] During the 1903 sanitary campaign, the local authorities ordered the demolition of nearly two hundred structures in Chinatown and the replacement of hundreds of defective pipes.[64] All reconstructions occurred at the owner's expense, including the use of concrete to cover basement floors and walls. Cisterns and cesspools located beneath houses were filled in and broken drains repaired with new plumbing.[65] The ground and upper stories were usually powdered with lime chloride and washed down with bichloride solution before old wallpaper was removed. Cracks and crevices were plugged with plaster. Before pouring cement, however, workers were instructed to remove up to a foot of subsoil and burn it, in the belief that it was potentially contaminated with germs, an antiquated notion several medical scientists, including Wyman, still held.[66]

In fact, one of the key sponsors of the campaign, Newell K. Foster, secretary of the state health board, continued to assume that plague was essentially a filth disease, kept alive in unsanitary localities and spread by rats. Foster had graduated in 1878 from Long Island College Hospital in Brooklyn, four years before the institution established its first pathological laboratory. Although the plague bacillus was seldom found outside human and rodent bodies, Foster wondered whether the germ thrived, multiplied, and acquired virulence in filthy places. Soil samples from San Francisco never disclosed their presence, yet the mingling of human feces with dirt in damp, dark places was believed to create favorable conditions for plague bacilli. Indeed, laboratory experiments showed that these germs perished faster in dry environments and were easily destroyed by heat, sunlight, and disinfectants. Foster's views on the importance of habitat for plague and Blue's focus on rats as plague carriers differed markedly, but they proved complementary.

In early February 1904, Blue credited the Danysz virus with killing hundreds of rats in Chinatown, Japantown, and the Latin Quarter as well as along city wharves. Additional funding for similar spring and summer operations was requested from the supervisors. However, Blue was aware that surviving rodents quickly acquired immunity after the initial baiting with the Danysz bacilli.[67] Meanwhile, the city health board went on high alert following the rapid deaths of members of an Italian family suffering from pneumonic plague, the highly contagious and lethal form of the disease. No further cases were found in the Latin Quarter, but the deaths suggested that infected rats were spreading from Chinatown to other San Francisco neighborhoods.[68] When a wrecking crew discovered eighty-two dead rats beneath the floor and

walls of a Chinese restaurant,[69] the authorities decided to place more bait laced with a Danysz virus broth in other food depots, warehouses, and stables in the neighborhood.[70] To motivate rat killings, Governor Pardee expressed a willingness to match San Francisco's offers and use taxpayer money for the payment of bounties.[71]

Despite initial resistance from property owners, Blue's plan of concreting all basement and ground floors in Chinatown gained momentum. In fact, the federal health officer suggested a similar process for the Latin Quarter and the rest of San Francisco. In April 1904, he estimated that this foundational work in Chinatown would go on for at least another eight months.[72] By the end of June, Hassler and his crew had completed this task in all previously condemned basements and cellars east of Dupont Street, from Sacramento to Pacific. This involved four entire city blocks and affected 125 buildings at a cost of $40,000.[73] During the summer months, the demolition and cleaning work moved west of Dupont Street.[74] In the meantime, no new cases of plague were reported, and statistics revealed a significant drop in Chinatown's mortality rate.[75] One newspaper congratulated the Pardee administration for its good work, attributing half of its success to the "systematic warfare on rats."[76] As predicted by Blue's experiences, the Danysz-laced cornmeal bait became increasingly ineffective, forcing workers to switch and employ phosphorized cheese.[77]

An August visit from William H. Welch to Chinatown and the service's laboratory provided a boost to Blue and his collaborators. Welch was emphatic that plague was solely transmitted through rats that harbored the responsible bacilli in their bodies. Although he admitted that the mode of transmission, including the flea theory, was still in dispute, experience suggested that disposal of the rodents stopped plague: not a single new case had been discovered since the two deaths in February.[78] Indeed, the habitat for existing rat populations and their fleas was being significantly degraded thanks to the massive use of disinfectants, poisons, and the removal of vast quantities of garbage that deprived them of food sources and slowed down their reproduction.

At the end of November 1904, the sanitary campaign west of Dupont Street was continuing to make progress. With no new plague cases discovered in Chinatown, San Francisco supervisors began to grumble about the costs and made smaller monthly allocations. The race to finish the demolitions and implement renovations was on. The Chinese district was not alone in getting a

"Unbuilding" Chinatown.
Williamson album (author's collection).

makeover. Because of rapid economic advances in the city, "unbuilding" San Francisco was becoming fashionable; older structures were no longer adequate for the present generation. Steel frames replaced wooden ones, creating a new professional: the wrecker, a flourishing businessman disposing and selling the spoils of his work, including bricks, studding, flooring, and rejected lattice for San Franciscans eager to remodel their own houses.[79]

When funding finally ran out in early February 1905, Hassler and Levy were forced to discharge their wrecking crew. Blue once more asked Supervisor D'Ancona to approve another supplementary allocation. Stockton Street, at the western border of the district, still hosted "some of the worst places to be found in all of Chinatown," pleaded Blue, forcing a brief return of the demolition crew.[80] A month later, the end appeared in sight. The state health board recalled

its three inspectors and all other employees, including Chinese interpreters. In its monthly report, the board pronounced health conditions in California to be excellent. Through poisoning, dispersal, and immunity, no cases of human plague had been reported in the entire state for more than a year, even as the scourge continued to spread throughout the world. By all appearances, Chinatown's rat population had ceased to be a reservoir for the disease. Health officials believed that victory was achieved because of the relentless war on rats; just as important was the fastidious disinfection of buildings, leading to the destruction of flea habitats.[81] At this point, a three-year investigation in India had demonstrated that once aspirated by the rat flea *Pulex cheopis,* the plague bacillus multiplied in the insect's gut before being injected into nearby rats and people during subsequent bites.[82] The progressive physical separation between humans and flea-infested rats through sustained rat-proofing allowed for plague to be "built out."[83] Plague in Chinatown occurred in a period of changing scientific assumptions about the transmission of the disease. During this time of flux, the frames of reference shifted from a focus on human contacts to one more concerned with rats.

As the campaign came to an end, Blue was forced to dismiss his most valuable assistant, Wong Chung, a key factor in its success.[84] On March 18, 1905, twenty-five guests attended a banquet to celebrate the conclusion of sanitary work in Chinatown. Widely recognized for his tact and leadership, Rupert Blue acted as toastmaster. With the Public Health Service station turned over to his assistant, Donald Currie, Blue quietly departed for a new post in Norfolk on April Fools Day, a quite appropriate date for a man who had patiently dealt with so many during his San Francisco tours of duty.[85] Throughout the plague campaigns, Blue's success owed more to his diplomatic skills than to his scientific curiosity. Local skepticism persisted; one prominent frontier surgeon, George Goodfellow, wrote that sanitarians and bacteriologists simply uttered "inane babble" when soliciting appropriations to "stamp out diseases."[86] Monitoring the rat population for possible plague infections now became a task for local health authorities.[87] Late in the year, Hassler was still requesting money from the supervisors for traps. According to one newspaper, he offered the supervisors a choice of buying simple ten-cent wire strangling traps or $1.50 "palatial catch-em-alives" that would require wafting the rodents to the "happy hunting grounds upon the soft billows of oblivion set in motion by a whiff of chloroform." The Finance Committee did not care; they voted that the rats be destroyed, "Hasslerized" for a sum not exceeding $2.00 each.[88]

While Hassler chased after dimes in San Francisco, Surgeon General Wyman fended off accusations of graft in Washington. The new Treasury secretary, Leslie M. Shaw, expressed dissatisfaction with the management of the Public Health Service and threatened a full congressional investigation. The complaints ranged from bloated hospital budgets to meddling with local sanitary regulations (as in San Francisco) and demanding costly interventions not warranted by the circumstances. According to press reports, frictions between the two men started following Shaw's appointment by President Roosevelt, a friend, in 1902. The secretary resented Wyman's penchant for bypassing the department and appealing directly to lawmakers for funding. The expansion of the service was not an unusual bureaucratic phenomenon in the nation's capital.[89] At congressional hearings in February 1905, Wyman requested $200,000 to cover expected deficits. A shrinking tonnage tax on steam vessels financing the service's operations proved inadequate for the growing personnel expenses linked to the 1902 act. Queried by lawmakers, the Surgeon General submitted a report documenting that those expenses had risen from $949,000 in 1903 to over a million dollars a year later.[90]

The Oriental City Project

Despite improved relations with inspectors since March 1903, the Chinese continued to dread the domiciliary searches for sick residents. By now, they were able to recognize the appearance of well-marked buboes as a sign of plague; if these swellings were present, the affected individuals were deserted or brought to coffin shops.[91] The practice of hiding the sick persisted. Another favorite ploy was misdirection—pretending that the sick or dying had just arrived in Chinatown from another locality, forcing officials to search for clues in East Bay communities. In an effort to apprehend furtive patients, officials began frequenting major Chinatown herbal shops, monitoring drug purchases, and following clients back to their homes.[92] Autopsies and burial in quicklime-filled caskets far away from ancestors still horrified most Chinese people.[93] Those living in basements remained terrified of being displaced by demolitions.[94] Renters in rundown tenement houses were subjected without warning to "short jobs": summary ejections from the premises, their "valueless" belongings ending up tossed into the flames.[95] Left with few options, they sought temporary shelter with clansmen and friends.[96] But not all went peacefully. In one location, frustrated dwellers set fire to a crumbling balcony, endangering the lives of hundreds.[97]

The last official Chinese plague case, number 117, occurred on February 14, 1904, when a 42-year-old professional gambler, Fung Bu, was found dead in a house at 714 Jackson Street, a notorious Chinatown "plague spot." Someone notified the Six Companies that he was dying, but no Western physician was called, and Chinese officials failed to provide information. According to protocol, such cases were routinely sent to the federal morgue for an autopsy. Assistant Surgeon Currie performed the examination the next day in the presence of his colleagues Blue and Lloyd, with state health board inspector Chester H. Woolsey, San Francisco Health Board inspector Mathewson, and city bacteriologist Canney in attendance. Among the findings were a typical bubonic lesion inside the right groin and swollen lymph nodes in the armpits, neck, and tonsils, all filled with plague bacilli. The case, officially labeled "tonsilar plague," was confirmed ten days later through animal inoculations.[98]

Blue reported a significant drop in Chinatown's mortality rate from 1902 to 1903. While the statistics were difficult to interpret given the coincident decline in the district's population, he and the service credited better sanitation.[99] In summer 1904, Hassler visited Chinatown to confer with leaders of the Six Companies and make further suggestions to improve conditions in the neighborhood. The authorities had enacted a ban on drying fish on rooftops and urged residents to refrain from spitting on sidewalks and buildings or throwing trash into the streets.[100] With no further plague cases discovered in Chinatown for six months, the Six Companies called a meeting in early September 1904. With support from Consul General Chung Poo Hsi, the Chinese Merchants Exchange, the Chinese Native Sons, and the Chinese Student Association, everybody pledged to work together on a comprehensive program to further enhance conditions in a sanitized Chinatown and boost its image. A key aim was the elimination of "sore spots," including brothels and opium dens, and the encouragement of legitimate trade. In time, the Chinese expected that such profligate places would be replaced with larger commercial structures and small parks. As a first step, student volunteers would patrol the district and prevent tourist groups and their guides from visiting vice-ridden areas.[101] However, the stereotypical image of Chinatown persisted: utter corruption and vice, populated by "leprous and ulcerous creatures clad in filthy rags, reclining in foul underground holes and smoking caldrons of opium."[102]

An effective makeover demanded curbs on drug use. For years, Chinese leaders, with the assistance of the *Chinese Western Daily,* repeatedly pleaded with ordinary residents to quit smoking opium, appealing to their national pride and

the longevity of the Chinese race. Clearly, this popular practice continued to reinforce the racially tainted image of Chinatown and its residents. A source of wealth for merchants and U.S. Treasury officials, the flow of opium into the district continued unabated.[103] During the plague years, "wipe out opium and save the race" became the slogan for an intensive campaign in which the addiction was portrayed as the Westerner's favorite weapon to weaken China and its people.[104] Sponsored by the Protestant Chinese Missions, Western physicians attending at the Tung Wah Dispensary became involved in an educational campaign to prevent and cure addiction; their Chinese colleagues in turn advertised several "opium quitting" medicines.[105]

As part of this effort to edify Chinatown, Consul Chung Pao Shi sent a petition to the San Francisco Police Commission demanding more protection and enforcement of ordinances regarding public baths and opium dens, the latter frequently visited by tourists. In fact, some tour guides staged dens by hiring Chinese vagrants already addicted to the drug and paying them with the opium they were told to smoke. When a group of guides mounted such a scene near the Chinese consulate, the stunt induced the ire of the diplomats and calls to the police department.[106] Under pressure, the Board of Police Commissioners held a hearing and listened to the testimony of two friends of the attorney representing the Chinese consulate, describing their tour in Chinatown. The commission was forced to pass a resolution informing all guides in the City and County of San Francisco that their licenses would be revoked if they escorted their clients to places where lewd, immoral, or indecent practices took place or opium was smoked "for exhibition purposes." The measure was meant to prevent tourists from acquiring "misconceptions" about San Francisco and the Chinese,[107] but the Chinatown Guides Association balked at the specific prohibition on observing opium smokers, which increasingly drove their business.[108] When members of the National Editorial Association met in San Francisco and decided to visit Chinatown's opium dens, the Six Companies dispatched a squad of men to ensure that all lairs were locked. Influential editors and journalists visiting the quarter failed to find a single smoker, leaving with the impression that pervasive opium smoking was another anti-Chinese myth.[109]

Chinatown continued to wrestle with image problems, but an increasingly assertive leadership tried to improve conditions, building on the just-completed sanitary work. A plague-ridden district had represented an intolerable "loss of face"; the disappearance of the disease could be an important step toward restoring order and respect. Tourists were not the only visitors flocking to Chinatown.

Debris from Hassler's demolitions attracted street vendors or "fakers" who peddled unburned refuse materials salvaged from buildings. Pieces of wood, bits of iron, and other possessions looted from the piles were hawked for nickels and dimes, especially on Sundays. Waverly Place, known for its temples and nightlife, came to be known as "fakers' row," crowded with sellers who wished to coax coinage from natives and visitors. Created by the cleanup, this gigantic, noisy flea market became another tourist destination, lifting somewhat the veil of mystery that had previously covered the neighborhood.[110]

In mid-November 1904, local newspapers reported once again on a plan to build a model "Oriental City" on the shores of San Francisco Bay, equipped with all modern facilities, shops, schools, theaters, a hospital, street railways, and sewage and incineration plants. Readers were informed that an association of local businessmen had agreed to form the United States Improvement and Investment Corporation, with George E. Ames as president and John Partridge as vice-president. In a press release, Partridge explained that the key purpose of the new corporation was to expand San Francisco's share of trade with the Far East. In 1903, commerce with Asia worldwide amounted of nearly $2 billion, but the United States only contributed 9 percent of this trade. The new company would establish proper port facilities in one of San Francisco Bay's inlets so that the resettled Chinese merchants would have all the means and encouragement to build up a large import and export business with China and thus secure a much larger share of the trade.

Partridge had inherited a hundred-acre parcel from his family's former estate beyond the San Francisco County line near Visitation Valley. Dotted with a few buildings, the Partridge farmland reached the shore's mud flats through the San Mateo Canal.[111] After his first proposal for an Oriental City on his property failed in 1900, Partridge had negotiated with the local health authorities, offering land in the Hunters Point area for the establishment of a new pesthouse.[112] While the efforts to sell his land at a good price were temporarily thwarted, his dealings with supervisors and health board members involved in the sanitary campaign against plague had seemingly morphed into business associations. The company's board of directors included three local physicians—Curtis G. Kenyon, John M. Williamson, and William B. Lewitt—the latter two members of former mayor Phelan's notorious "bubonic health board." Listed on the advisory board were other former San Francisco health officials, notably board members Vincent P. Buckley, Gerald J. Fitzgibbon, and William E. Hopkins.[113]

Instead of purchasing Chinatown properties from their present owners, the corporation, claiming an initial capital stock of $25 million, intended to make them partners in their venture. Property owners would be asked to exchange titles of their real estate holdings for preferred stock secured by bonds, thus becoming shareholders in the new enterprise. After acquiring titles from at least two-thirds of the current owners, the company promised to completely raze the old neighborhood, widen streets, and build new structures. The entire process of construction, removal, and renovation would increase the total real estate value of Chinatown from an estimated $6 million to $25 or even $30 million, taking six to ten years to complete. As a bonus, the plan could substantially contribute to the proposed beautification of San Francisco.[114]

The Partridge scheme appeared to be another predatory San Francisco real estate plot that had the full support of Mayor Schmitz and the local business community; after several previous failures, the current corporate plan promised a better outcome.[115] However, the timing was poor; property values in Chinatown were already rising because of the extensive sanitary renovations and lack of new plague cases. Yet the proposal seemed to follow Surgeon General Wyman's earlier call for private capital to aid in the destruction of unsuitable tenements and build sanitary housing for the poor, "less for profit than public benefaction."[116] Rupert Blue briefly described Partridge's proposed "Oriental City" project to Surgeon General Wyman. He wondered why several physicians from the old San Francisco Health Board were among Partridge's business partners. Potential investors, former health board president Williamson included, stood to benefit from a filthy and plague-ridden district with declining property values. Could it be that they had plotted all along with the supervisors, deliberately refusing to provide appropriations and thus delaying Chinatown's cleanup? In Blue's opinion, the new corporation was definitely not organized for the purpose of improving sanitary conditions in San Francisco but "merely for [making] money."[117]

Two months later, Partridge reported progress on his Oriental City proposal. With 550 individual Chinatown property owners, thirty of them Chinese, the entrepreneur pressed to secure at least two-thirds of their titles.[118] The February 1905 issue of the *Merchant's Association Review* confirmed that the removal of Chinatown had been on the Merchants Association's agenda for years and, at last, this goal seemed feasible through private enterprise and at small cost to San Francisco taxpayers. The project called for the city to convert Dupont Street into a broad and beautiful boulevard, widened from Bush to

Broadway Streets at an estimated cost of $2.5 million. With a tunnel below Nob Hill along Broadway, the plan would link Pacific Heights and the center of the city. Such a corporate solution to San Francisco's perennial Chinatown problem was intended to reach out beyond individual ownership, but the article presciently observed that Partridge's plan faced the daunting task of convincing hundreds of proprietors and their estates to join in this venture.[119] Worse, nobody consulted the Chinese leadership about the plan.

Another update, published in mid-April 1905, announced that officers of the U.S. Improvement and Investment Company had secured an option to purchase the hundred acres of land for the construction of their "Oriental City."[120] The corporation also planned to raise $7.5 million by issuing guaranteed bonds.[121] Partridge had finally managed to locate a corporate buyer for his land, but the swap proved too risky for most Chinatown property owners, especially widows and retirees who depended on regular rental income for their livelihood. Most heeded municipal orders believing that repairs were good investments capable of enhancing the future value of their properties. This was no time to gamble away tangible assets for shares of dubious value belonging to a fledgling corporation.

In early March 1905, Lee Ling, previously a leader of the Suey Bing Tong, was elected secretary of the Six Companies, a stunning development that presaged a more activist role for the benevolent confederation.[122] Chinatown's merchants quickly went on to support a ban on American products in the homeland, called in retaliation for extending the Chinese Exclusion Act. The boycott, meant to force a reexamination of the racist legislation, quickly spread to other American cities.[123] In San Francisco, this movement united diplomats, merchants, and workers, who displayed a degree of nationalist fervor and cooperation that would serve them well after the earthquake. In fact, the Chinese community seemed to undergo a series of social and cultural changes that made it more assertive and outward-oriented than ever before.[124]

By late 1905, Chinatown's remake had ended. "San Francisco has accomplished what no other city similarly infected ever did," boasted Chief Sanitary Inspector Hassler. The district's basements featured solid cement floors; passageways between buildings were free of obstructions, with most debris removed from the light shafts and crevices between houses. The visual change was dramatic; so was the final price tag—nearly a million dollars. Authorities estimated that Chinatown property owners had spent up to $500,000 rehabilitating their buildings, an average of almost $1,000 per landlord. The Citizen's

Relief Committee raised $30,000 to assist local authorities. San Francisco calculated its expenses at nearly $45,000 since 1903, with a comparable amount provided by the state health board. Although not specifically itemized, federal outlays for personnel, travel, and laboratory work were similarly steep.[125]

Pyrrhic Victory

Fears that plague would spread beyond the confines of Chinatown started as early as mid-1900, when health officials were unable to discover more than a handful of new cases of the disease. Many assumed that a clandestine transfer of sick and dead Chinese to Oakland and fishing and farming villages along the Sacramento and San Joaquin River Delta would spread the disease. Joint federal-state inspection trips to those areas in 1902 focused on finding plague-infected people. Then, in mid-September 1903, the Sacramento *Evening Bee* reported an outbreak of disease among ground squirrels in the southern part of Contra Costa County, which had killed presumably thousands of animals. Although plague was suspected, no human cases followed. California's farmers and fruit growers, who routinely sustained great losses from such predatory rodents, actually welcomed the massive die-off. Any efficient means for destroying these animals constituted an important gain for California's economy.[126]

When the 39-year-old wife of Frank Soto died of bubonic plague on a farm near Concord, California, in late February 1904, Blue managed to link her death to that of two other non-Chinese victims reported the previous year. All three persons had lived in the same valley, and the local physician reporting the Soto case indicated that while the farmhouse was in good sanitary condition, horses in the stable had trampled several rats, suggesting that they were probably diseased. The home's vicinity to Port Costa, the main destination for Hawaiian sugar shipments, suggested the possibility of plague-infected rats escaping from incoming ships and roaming the countryside. Could they be responsible for the death of ground squirrels populating the San Ramon Valley and San Pablo Bay?[127] Blue confirmed the die-off among ground squirrels—*Citellus beecheyi,* which closely resembled the Tibetan marmot—in the San Ramon Valley of Contra Costa County. Dead rats were also found along San Pablo Bay, but their advanced state of decomposition precluded bacteriological analyses.

Health authorities remained seriously concerned about the cause of such die-offs in the East Bay; if plague persisted in rodent reservoirs, all sanitary

work being done in San Francisco would be futile. After further attempts to trap and obtain sick or dead animals failed, California health inspectors and federal officers again traveled to the areas during the fall of 1904, interviewing ranchers. During the ensuing months, Blue attempted without success to bacteriologically examine some of the dead wild rodents.[128] There was no market for these animals and thus no trappers; moreover, most sick squirrels remained hidden in their burrows, and after death their carcasses decomposed in invisible tunnels. The situation became clearer a month later, when federal officials were informed about the sudden death of a young boy with what appeared to be plague-like symptoms. He and a brother had been camping and hunting near Moraga in the East Bay canyons, shooting squirrels, then cooking and eating them. Unfortunately, the boy's body had already been embalmed and buried without an autopsy. Increasingly concerned, Blue confided his worries that infected rodents could be infesting the entire state of California, their "burrows forming a continuous chain from one end to the other."[129] His suspicions were confirmed through additional reports of die-offs during the summer.[130]

By November 1904, a state inspector made yet another trip by foot and horse and buggy to Contra Costa County from Oakland to Walnut Creek, following clues provided by local ranchers. His mission was to trace the boundaries of a 1903 epizootic and determine whether the disease was still prevalent. Deaths apparently began on the waterfront at Port Costa, gradually spreading southward as far as San Ramon and north toward Antioch. Since then, squirrels and rats had virtually disappeared; rumors circulated that university professors had placed poisons in the burrows. Indeed, unbeknownst to federal health officials, the same Danysz virus Blue employed for killing rats in Chinatown had been mixed with cornmeal and placed in grain warehouses at Port Costa during 1902 and 1903. All sick animals returned to their burrows and died there, quickly devoured by coyotes.[131]

This information temporarily derailed Blue's plague investigation. Wild squirrels were indeed considered a pest in California's agricultural regions, and local authorities counted on scientists to provide them with the most efficient methods of destroying them. But were the animals dying because of successful poisoning with the "virus," infection with plague, or both? Wyman wanted to know whether ground squirrels were indeed susceptible to plague and whether feeding them viruses was an efficient way to destroy them.[132] In a letter to Currie, Glennan, now in charge of domestic quarantine at the service, directed the officer to proceed to Contra Costa and investigate the conditions prevailing among

surviving ground squirrels. Together with a Chinese interpreter, microscope, and steel traps for placement over burrows, Currie was dispatched to the region for a "complete and quiet investigation."[133] The question needed to be settled as it could lead to the reappearance of plague in San Francisco and other parts of California.[134]

Although the presence of plague among wild rodents was not officially confirmed until August 1908, Wilfred Kellogg admitted in a retrospective published in 1920 that the plague had most likely been transmitted from stowaway rats to squirrels via infected fleas in the vicinity of the Port Costa warehouses involved in the grain and sugar trade. The former San Francisco city bacteriologist based this assumption on two plague cases, Bock and Slater, reported from two widely separated locations in the East Bay in August 1903.[135] By 1908, conclusive research demonstrated the link between plague and ground squirrels.[136] Eventually, intimate association and sharing of fleas between urban rats and wild squirrels living in the surrounding countryside was demonstrated when specimens from both were obtained from the same burrows in 1910.[137] Moving inland, the plague was carried eastward by wild rodents, crossing the Sierra Nevada, then leaping across the prairie from burrow to burrow until it reached the Rocky Mountains, eventually becoming permanently ensconced in nearly half of the United States territory.[138] The Chinatown episode turned out to be just the first, temporary stop in North America for a tide of plague-infected rodents that had left their Central Asian reservoirs centuries before.[139]

The final tally included 119 official plague cases—97 Chinese, 7 Japanese, and 15 of European origin. The preponderance of Chinese casualties stemmed, in part, from the fact that from the start, officials concentrated their attention exclusively on fatalities occurring in Chinatown, because of its unhealthy reputation. Other San Francisco neighborhoods, with the exception of the Latin Quarter late in the outbreak, were never inspected. No plague diagnoses were reported in these districts; most local practitioners were unfamiliar with the clinical and pathological manifestations of plague or willing to shield patients and their families from stigma and potential isolation. In a memorandum submitted in January 1903, Assistant Surgeon Currie agreed that the service possessed no means to ascertain non-Chinese deaths in other parts of the city. Given the sustained efforts of Chinatown residents and leadership to hide the sick and dead, as well as comparable contemporary mortality rates for bubonic plague, the true number of individuals contracting the disease between 1900

and 1904 in this area remains speculative; estimates range in the hundreds, instead of the thousands of victims reported for China and India. If the Chinatown outbreak yielded a modest human toll, credit should primarily go to the relative drought and lower humidity that compromised flea breeding during the early plague years. Moreover, San Francisco primarily hosted the rat flea species *Ceratophyllus fasciatus*, considered an inefficient transmitter of *Yersinia pestis* to all rodent hosts.[140]

Epilogue

> Fire has reclaimed to civilization and cleanliness the Chinese ghetto, and no Chinatown will be permitted in the borders of the city . . . it seems as though a divine wisdom directed the range of the seismic horror and the rage of fire god.
>
> —PIERRE N. BERINGER (APRIL 1906)

On April 18, 1906, at 5:12 A.M., a powerful earthquake awoke the residents in San Francisco. A succession of shocks lasting about a minute twisted buildings, toppling and crashing them, sending clouds from the falling rubble into the early morning sky. A spur of the estimated 7.9-magnitude quake ran up the hill at the southern edge of Chinatown. Panicked residents streamed out of crumbling structures while others remained trapped in caved-in basements rendered more deadly by the concrete poured during the 1904–1905 sanitation efforts. The now uncluttered alleys, however, offered better escape routes for those above ground. A Nob Hill real estate agent traveling in a Clay Street cable car through Chinatown observed entire buildings lean and fall; since most houses were built of wood and brick, damage was severe. Hundreds perished, buried alive behind iron doors and crumbled walls; others escaped with injuries. Refugees crowded into Portsmouth Square, pushing for space with Italian and Mexican survivors from their nearby enclaves. Fearing a tidal wave, others climbed the surrounding hills. Panicked Chinese worshippers erected a temporary altar with an image salvaged by a joss attendant.[1] Maybe Tu Di Gong, the earth god, was angry. Beating a gong, they desperately tried to keep the evil spirits away.

Because of broken gas and water lines, fires soon followed, burning out of control. In mid-afternoon, a squad of army dynamiters created a firebreak along Kearny Street, attempting to separate the burning downtown area from the rest of the city. Running out of sticks, they reluctantly accepted black powder from local firefighters to continue their task, fully aware that they risked igniting more flames. Multiple explosions and fires along buildings in Chinatown followed, burning those left behind. A terrified steer ran through the district, part of a cattle flight into downtown, perhaps a bad omen. A witness recalled seeing Chinese men, their faces seared and blackened by flames, their blouses on fire, reluctantly abandoning their possessions and fleeing the scene.[2] The Tung Wah Dispensary was completely destroyed, as was the venerable Kong Chow Association headquarters, although a keeper managed to rescue the statue of Kwan Tai. The same happened at the Tin How temple with its statue of the

Chinatown in ruins after the earthquake and fire. A Chinese survivor contemplates the smoldering devastation, with the tower of the Hall of Justice in the background, April 1906.
Photograph by Arnold Genthe. California Historical Society, FN-01859 / CHS2009.109.tif.

goddess Mazu. Throughout the night and early morning most of the district was turned into ashes. With its foundations bare, the fabled extensive network of tunnels beneath Chinatown was nowhere to be found, exposing another myth.

Forced to leave their bundles behind, a majority of Chinese refugees managed to reach the waterfront, catching ferries to Oakland, Berkeley, and Richmond. Affluent merchants boarded trains to Los Angeles. A flotilla of junks brought homeless residents to nearby shrimp villages and Sacramento River orchards. Hundreds were allowed to leave on ships bound for China. Witnesses observed a small group gathering among the ruins and praying to try to prevent recurrence of the disaster. Kneeling in the ashes of a temple, they burned incense and spread out food offerings before a deity's charred image.[3] Those who remained were herded into improvised camps.[4] Few wounded or burned Chinese were attended to or taken to emergency hospitals.[5] The rest were quickly shuttled from one location to another; nobody wanted to be near them. Neighbors near the Presidio camp expressed anxiety about vile Chinese odors floating through their front doors.[6] News of such blatant discrimination reached President Roosevelt, who responded with a message to local authorities urging fair and compassionate management of the disaster.[7] While the Chinese were treated as virtual prisoners in the camps, a horde of looters—rich and poor—descended on the abandoned district in search of any valuables, precious metals, and surviving chinaware. Prominent among the looters were members of the National Guard deployed to keep order and prevent theft.

Chinatown's stigmatized image as a "plague spot" survived its destruction. The discourse of filth and stench continued to resonate as an important component of anti-Asian racism and discrimination. From the start, Mayor Eugene Schmitz's administration made it clear that the Chinese would not be allowed to return to their district. Nature had finally accomplished in a day what municipal authorities had attempted for decades: purification.[8] Appointed to head a committee to plan reconstruction, former mayor James Phelan wished to implement his previous beautification plan, insisting that the old Chinatown site become a residential district, now that the fire had "vaporized all germs."[9] A special committee for the permanent relocation of Chinatown headed by Abe Ruef promptly revisited John Partridge's plan for an Oriental City to be erected in Visitation Valley, although its location in San Mateo County implied the loss of future tax revenues for San Francisco.[10] Rumors of a Hong Kong syndicate of merchants financing their own residential venture floated around

New York.[11] For once, both Schmitz and his archrival Phelan agreed: get rid of the Chinese.

Thanks to the intervention of the American-educated Chinese minister Liang Chen, who immediately sent the legation's first secretary, Chow Tszchi, to the Bay Area, China sought to protect its distraught leadership and scattered citizens through diplomacy and cooperation rather than confrontation. Together with Consul General Chung Poo Hsi, the current Six Companies presidents held a series of meetings with state and local authorities designed to stop the out-of-town relocation plan. For the remaining Chinese such an option was unacceptable. As early as April 29, the editor of the *China Western Daily,* Ng Poon Chew, urged the immediate rebuilding of Chinatown without involving city officials.[12] Chow Tszchi declared that the consulate grounds, owned by the imperial government, would be restored on orders of the Empress Dowager under the freedom of residence right guaranteed by the U.S. Constitution. Encouraged, other Chinese property owners pledged to follow suit. The alternative was for the Chinese to abandon San Francisco and establish their trading firms, businesses, and residences in Oakland, with Portland and Seattle as potential alternatives. The loss of trade, taxes, and business would be staggering to the city, particularly at a crucial time when San Francisco strained to recover from its disastrous earthquake and fire.

Sensing a shift in the relocation issue, twenty-five non-Chinese property owners created the Dupont Street Improvement Club on May 10 to secure the rebuilding of Chinatown with a caveat: "We want a Chinese quarter constructed on a thoroughly sanitary plan."[13] Restoration became dependent on satisfying Edwin Chadwick's sanitary paradigm. Wider streets and the elimination of narrow alleys and passageways would enhance ventilation and bring sunlight into the district. The frequently vilified landlords argued that a fireproof and cleansed Chinatown would be an asset to them as well as to the city. After meetings with Schmitz and Ruef, owners strongly insisted on their right to rent all restored property to occupants of their choice. The Chinese, of course, remained their favorite tenants. Even the *Chinese Western Daily* demanded strict compliance with municipal public health codes and recommended the establishment of a separate Chinese sanitary department to monitor conditions.[14] According to one local writer, "It may lack the familiar holes, corners, and smells of Chinatown, but it will be more agreeable to the eye if not quite so piquant to the nose."[15]

In an extraordinary reversal of fortunes, Chinatown started its rebuilding process. New structures even displayed oriental touches. The survival was pri-

marily a tribute to Chinese tenacity and cultural cohesion. A select population committed to its long-term survival trickled back, together with temples and ghosts like Wong Chut King.[16] For all the terror and vicissitudes its residents had suffered, part of the impetus for Chinatown's post-1906 rebirth should be attributed to the plague outbreak. In the course of its successful eradication, the disease forced San Francisco and indeed California and the country at large to deal more closely with Chinatown and its people. Plague also tested the resiliency and adaptability of a long-suffering Chinese community. New forms of interaction with the white community developed during periodic searches for plague victims and cleansing in the name of public health. Early disdain and aggression by eager sanitarians eventually transformed into greater toleration, reciprocated by many Chinese willing to adopt some Western procedures even as they retained their cultural identity.[17] Moreover, Chinatown's leadership employed American legal expertise provided by leading local law firms; distinguished attorneys successfully challenged arbitrary and racially discriminatory measures in the federal courts. At the same time, medical treatments dispensed by a cadre of Western-trained physicians at the Tung Wah Dispensary introduced a measure of modernity. This was particularly true for the younger generation of Chinese Americans who accepted sanitary upgrades and eventually planned a new dispensary.[18]

When the plague briefly returned to San Francisco in 1907, not a single resident of Chinatown was among the official victims.[19] Following its final eradication, Rupert Blue aptly expressed a prime theme of this book: the success of a plague campaign depended on efforts to educate the general public about its dangers and seek their cooperation. Scapegoating or "othering" those afflicted with disease was not only ineffectual but also dehumanizing. "People must be approached in the easiest way and addressed in their own language," Blue wrote, especially in America, which historically had never experienced such a frightful epidemic.[20] The lessons from "old" Chinatown were simple: top-down authoritarian measures—even those grounded in widely respected scientific insights—will fail if the partnership with afflicted communities is coerced without respect for their values. This is particularly critical in America's emerging multiethnic society. Wong Chut King was just one bit player in the plague drama. Cooperation instead of confrontation with those at risk is essential if future efforts to contain rampant disease are to achieve their desired success.

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Appendix: *San Francisco Plague Cases*

The following 119 cases, listed in chronological order, were collected and summarized from reports included in the yearly *San Francisco Municipal Reports,* the *Annual Report of the Surgeon-General of the Marine Hospital Service of the United States,* and medical journals including *Public Health Reports, Occidental Medical Times,* and the *Journal of the American Medical Association.*

1900

1. **Wong Chut King** (also identified by Westerners as Chick Ging), 41, Chinese male laborer, died on March 6, 1900. He had been living in the basement of the Globe Hotel, at 1004 Dupont Street. Wong was ill for several months, and two Chinese practitioners were treating him for an apparent venereal disease. No full autopsy was ever conducted, but tissue samples obtained from a prominent bubo eventually led to the bacteriological diagnosis of bubonic plague.
2. **Chu Gam**, 22, Chinese male laborer, lived at 723 Sacramento Street. His demise was reported on March 15, 1900, but he may have been dead for about a week, as the body was in an advanced state of decomposition. A postmortem examination was performed. Although no buboes were found, some tissue tested positive for plague bacilli. Cause of death was recorded as plague, possibly septicemic.
3. **Ng Ach Ging**, 35, Chinese male cook, died on March 17, 1900, at 905 Dupont Street. His decomposed body was turned over to an undertaker. An autopsy failed to discover buboes but samples from multiple organs contained plague bacilli. Final diagnosis of death was septicemic plague.
4. **Lee Sung Kong**, 47, Chinese male worker, lived in Oneida Place, a small Chinatown alley. His decomposing body was found on March 18, 1900, about forty-eight hours after his death. The autopsy revealed no buboes, but cultures taken from various organs, including the spleen, showed plague bacilli. Plague, possibly septicemic, was the final laboratory verdict.
5. **Law An**, 38, Chinese male, died on April 24, 1900, at St. Louis Alley off Jackson Street. He was said to have lived in California for thirty years, lately in a village on the Sacramento River. His body revealed a prominent bubo in the left groin, and a tissue sample sent to the Angel Island laboratory confirmed the presence of plague bacilli.

Location of plague deaths, Chinatown, San Francisco, 1900–1904.

6. **Lim Fa Muey**, 16, Chinese female employed in a cigar factory and living in 739 Clay Street, died there on May 11, 1900. She was the first reported female plague victim in Chinatown. Inspection of the body disclosed the presence of a walnut-size bubo on the right thigh. No autopsy was performed, but samples from the lesion helped to establish a diagnosis of bubonic plague.
7. **Chu Sam**, 38, Chinese male merchant, living at 717 Jackson Street, died on May 11, 1900. He had been allegedly living in California for the past fifteen years. No obvious bubo was observed. The postmortem inspection carried out on the rapidly decomposing body was ambiguous, but bacteriological cultures from several tissues disclosed plague bacilli. The final diagnosis was bubonic plague.
8. **Chin Moon**, 16, Chinese female and a long-time resident of California and Chinatown, died May 15, 1900. She was employed as a servant for a Chinese family living at 730 Commercial Street, where she fell ill five days before her death. Chin suffered from headaches, high fever, and pain in the right thigh. Attended by two Western physicians practicing in Chinatown, she was admitted to the Pacific Hospital with a diagnosis of typhoid fever. A postmortem dissection, however, showed a typical bubo, and tissue cultures confirmed the presence of bubonic plague.
9. **Herr Woon Jock**, 53, Chinese male laborer, died on May 17, 1900, at 740 Pacific Street. He had recently arrived from Stockton, but nothing was known about his illness. An autopsy disclosed a bubo on the left thigh, and tissue samples from the lesion confirmed another case of bubonic plague.
10. **Dang Hong**, 40, Chinese male worker, died early in the morning of May 29, 1900, at Guan Fu Sheng's coffin shop at 706 Pacific Street after spending several months living there in its "hall of tranquility" recovering from a venereal ailment. He had been living in California for the past ten years and claimed to also suffer from a tuberculous swelling in the neck (scrofula). The postmortem at the undertaker's establishment drew a crowd of Chinese onlookers, journalists, and Western physicians. Although the findings were compatible with a generalized infection, the diagnosis remained contested. Further samples from lymph nodes eventually revealed the presence of plague bacilli, a fact confirmed by animal inoculations.
11. **Chen Kuey Kim (Chaw Gue Gong)**, 49, Chinese male cigar maker and medical practitioner, living at 817 Clay Street and a resident of California for twenty-two years, died on June 2, 1900. The Chinese undertaker disclosed that the deceased suffered from consumption, getting weaker in spite of treatments. Following his death, Western physicians and attorneys working for the Chinese leadership obtained their own tissue samples from neck and groin lymph nodes. After protracted and bitter disagreements between experts, local and federal officials eventually confirmed the case as bubonic plague.
12. **Jay Man Tong**, 60, Chinese male merchant and high Six Companies official residing on 759 Clay Street, died suddenly on June 9, 1900. He had been sick for a year, apparently suffering from heart disease. Although his Western physician provided a death certificate listing angina pectoris as the cause of death, the San

Francisco health authorities insisted in performing a complete autopsy, but the decomposing body yielded few signs suggestive of plague. Embroiled in another controversy, federal officials finally managed to grow pure plague cultures in test animals obtained from a variety of tissue samples.

13. **Lee Wing Tong**, 40, Chinese male laborer who lived at 767 Clay Street, died on July 6, 1900, two days after admission and placement in isolation at the San Francisco City and County Hospital. After suffering from a high fever for about two days, he had been admitted there by a Western physician who diagnosed his case as typhoid fever. The patient displayed swollen and tender inguinal lymph nodes and promptly lapsed into a coma. Following a postmortem examination, bacteriological studies confirmed the diagnosis of bubonic plague, vehemently challenged by some local experts.

14. **William Murphy**, 34, white male teamster, died on August 11, 1900, at the City and County Hospital. A native Californian who lived a few blocks from Chinatown at 427 Dupont Street, he had been admitted four days earlier complaining of headaches, fever, pain, and swelling in his right groin area; he also had trouble breathing. An autopsy attended by prestigious local academics disclosed extensive lung and lymphatic inflammation. The final diagnosis was plague septicemia, including pneumonic and bubonic manifestations. Murphy became the first non-Asian victim diagnosed with plague. Apparently a morphine addict, he was suspected of visiting Chinatown's opium dens.

15. **Hom Ton**, 29, Chinese male who lived in the basement under a store at 900 Dupont Street, was found dead on August 15, 1900. For about three weeks before his death, both a Chinese and a Western practitioner suspected a case of mumps because of swellings around his neck. A complete autopsy exposed inflamed lymph nodes that contained plague bacilli. As on other recent occasions, bacteriologists working for the California State Board of Health and Chinese leadership vigorously challenged the diagnosis.

16. **Lea Do Hen**, 50, Chinese male cigar maker who apparently had lived in California for twenty-eight years, died on October 5, 1900, at 710 Dupont Street. No information could be obtained from friends, roommates, or co-workers. An inspection of the body exposed a bubo the size of an egg on the right thigh. Samples showed the presence of plague bacilli, confirming the cause of death as bubonic plague.

17. **Chun Yen**, 37, Chinese male laborer, sick for two weeks, supposedly died of typhoid pneumonia on October 10, 1900. He had been in California for ten years and lived at 767 Clay Street. An autopsy determined the presence of hazelnut-size lymph nodes, barely detectable because of his heft, inside his right groin. Bacteriological studies confirmed the bubonic plague diagnosis. Chun probably contracted the disease in the same house frequented by Lee Wing Tong (case 13).

18. **Tai Dong Leong**, 39, Chinese male clerk in a clothing store with fifteen years of residency in California, died on October 14, 1900, at 905 Clay Street. For three days he had suffered from fever, nausea, and vomiting, followed by prostration and the appearance of a painful swelling in the groin. He consulted with several

Western physicians and was visited by local and federal health officials who took blood and tissue samples. Among local bacteriologists the diagnosis was unanimous—bubonic plague.

19. **Moon Li Chee Yung**, 30, Chinese female living at 802 Dupont Street, died on October 31, 1900. A partial autopsy revealed the presence of a necrotic bubo inside the left thigh, confirming the cause of death as bubonic plague. A roommate who had died two weeks earlier after a brief febrile illness was certified by officials as having pneumonia but possibly represented another case of plague.

20. **Yung Wah Noui**, 9, Chinese female living with her mother, Moon Li Chee (case 19), at the same address, died on November 1, 1900, twenty-four hours after her mother's demise. She also displayed symptoms of acute infection. A postmortem conducted on her rapidly decomposing body showed widespread signs of inflammation, including pneumonia in both lungs. Studies confirmed septicemic and pneumonic plague. Another young woman living in the same house had died five days earlier, certified as perishing from a kidney ailment. Officials surmised that all three had died of plague, the first deaths occurring in the same Chinatown household.

21. **Anne Roede**, 28, white female trained nurse, died at Children's Hospital in San Francisco on November 3, 1900. The patient had entered the institution three days earlier with a history of possible exposure to typhoid fever or "nasal diphtheria" while attending a teenage patient two weeks before his death. Admitted to the isolation ward, she complained of abdominal pain and was first treated with diphtheria antitoxin. The appearance of a bubo near her left armpit shifted her diagnosis to bubonic plague. An autopsy verified widespread signs of infection. Despite the exhumation and examination of the teenager's body, no linkage could be established. Anne became the first official plague case with no obvious links to Chinatown, although her refusal to disclose her address and activities immediately preceding her illness left the case open to further speculation.

22. **Lee Ho**, 36, Chinese male living at 844 Washington Street, died December 7, 1900, after being ill for only six days. Prior to his death, local and state health officials visited him and discovered a large tender swelling in his left groin. A complete autopsy demonstrated widespread signs of inflammation that turned out to be caused by an abundance of plague bacilli, resulting in another bubonic and possibly septicemic case of the disease.

1901

23. **Chun Way Lung**, 60, Chinese male merchant residing at 720 Jackson Street, died on January 6, 1901. His associates disclosed that the deceased had been afflicted with gonorrhea for the past three weeks, developing a swelling in his left thigh. Before he died, he had a high fever, nausea, and vomiting. A postmortem examination and the laboratory confirmed suspicions that he suffered from bubonic plague.

24. **Leam Wing Low**, 59, Chinese male laborer who had resided for thirteen years in California and lived at 833 1/2 Clay Street, died on January 15, 1901. No additional information could be obtained. An initial inspection and subsequent dissection showed signs of generalized infection. Bacteriological studies confirmed the presence of plague bacilli. The cause of death was recorded as bubonic plague.
25. **Angelo Colombo**, white male, a native of Switzerland who lived at 5 Lafayette Place outside Chinatown, died early on January 15, 1901. Unconscious, his face flushed, he had been brought to the City and County Hospital by a police patrol a day earlier. An examination on admission disclosed fever and an enlarged liver and spleen. The autopsy confirmed signs of abdominal inflammation but no enlargement of lymph nodes. The final diagnosis was septicemic plague. Without any further details about his illness, this third non-Chinese plague death remained one of the most puzzling cases of the epidemic.
26. **Chu Ah Chon**, 44, Chinese male actor, died during the morning of February 5 in a room above the Washington Street Theater at 814 Washington Street. Members of the federal commission sent to San Francisco to study the presence of plague discovered him thanks to a tip from their Chinese interpreter. A postmortem examination conducted in the dimly-lit alcove of a Chinese undertaker's exposed enlarged lymph nodes in the neck, armpits, and groin. Aware that the Chinese were strongly opposed to autopsies because they caused extensive bodily mutilation, commission members obtained only a few tissue samples from the lesions, confirming the diagnosis of bubonic plague in their own laboratory.
27. **Lum Hong Yuen**, 37, Chinese male cook and waiter working at the Chinese Theater, died on February 6, 1901, in his room at 88 Ross Alley. He had been ill for three weeks, complaining of symptoms of venereal disease. Before dying, he had consulted a Chinese practitioner. Informed about the death by the federal commission's interpreter, his body was inspected at the undertaker's establishment and found to have typical bubonic lesions. Pathological and bacteriological studies of the tissues confirmed the cause of death as bubonic plague.
28. **Wong Chi Lui**, 45, Chinese male cigar maker, was found dead at 181 Waverly Place on February 7, 1901. He had been ill for about two weeks, complaining of a fever, loss of appetite, and pain in the groin and lower abdomen. A Chinese practitioner had applied honey and a salve to the sore belly. A postmortem inspection disclosed the presence of a large bubo inside the left groin, and with the permission of friends of the deceased, tissue samples were obtained during a partial autopsy. All tests authenticated the diagnosis of bubonic plague, the third case discovered by the commission in two days.
29. **Tom Shon**, 51, Chinese male actor, lived in a room above the Chinese Theater at 814 Washington Street, near a previous plague victim, Chu Ah Chon (case 26). In spite of not feeling well for six or seven months, he had been employed at the theater for the past two weeks, then started suffering from fever and delirium. Reported to the federal commission by their interpreter, Tom was examined and found to have enlarged lymph nodes prior to his death on February 10, 1901.

Another partial autopsy and microscopic studies verified the presence of bubonic plague.

30. **Ng Ah Bock**, 45, Chinese male from St. Louis Alley, was found dead in a coffin shop on Sacramento Street on February 11, 1901. He had been ill for two weeks and under the care of a Western physician. A day prior to his passing he was seen in his room by a member of the federal commission who suspected that he suffered from cervical bubonic plague. A complete dissection at the undertaker's establishment and subsequent laboratory studies clinched the clinical diagnosis.

31. **Fong Ah Fong**, 12, Chinese female living at 747 Sacramento Street, died on February 11, 1901. According to her mother, she had been ill for about two weeks with a cold, headaches, and nausea. Members of the federal commission observed this patient clinically for five days before her sudden death. She only had a mild fever. In spite of strong protests from the child's relatives, small needle biopsies from the spleen were sufficient to confirm to diagnosis of septicemic plague, the sixth and final official plague case reported by the federal commission.

32. **Fong Lung Why**, 33, Chinese male, died on February 24, 1901, at 13 Waverly Place. According to statements from the Chinese undertaker, two weeks previously this ill man had arrived from Sacramento. An autopsy failed to discover buboes, but spleen tissue confirmed the presence of plague bacilli and the diagnosis was septicemic plague.

33. **Leong She**, 43, Chinese male, died April 1, 1901, at 740 Pacific Street, Fong's well-known coffin shop. His death followed a suspicious interval of almost four weeks in which few deaths were reported in Chinatown. The quickly decomposing body yielded only a large spleen for examination, yet cultures and animal inoculations sustained a diagnosis of septicemic plague.

34. **Leung Tun Gee**, 59, Chinese male laundryman, died April 4, 1901, at 417 Commercial Street, outside of Chinatown. According to the undertaker, this man arrived already sick from Santa Barbara four days before his death. He claimed to have been unwell for about two months and now had pneumonia. Lacking facilities for a complete autopsy, local health officials removed an enlarged spleen, and the plague diagnosis was verified through bacteriological studies.

35. **Lee Ah Wah**, 46, Chinese male cigar maker, died on July 6, 1901. For the past five to six months he had lived at Bouldin Island, an agricultural area in the San Joaquin Valley. His body was brought directly to an undertaker's shop. Efforts to obtain more information failed; no one claimed to have known him. An inspection by federal health officials exposed cardiac lesions and a collapsed lung. Tissue samples from an enlarged spleen showed the presence of plague bacilli.

36. **Shina (Saina) Takagi**, 23, Japanese female prostitute, died on July 9, 1901. She and two other young women had been first seen a day earlier by a Japanese physician and state health board official, who was called to the Yoshiwara House, a lodging house at 845 Washington in Chinatown that functioned as a brothel. All three women—part of a group of seven prostitutes—apparently had been stricken six days earlier with large, painful buboes inside their thighs. Shina was already in

medical treatment from a reputable local physician for a heart murmur and suspected typhoid fever. Just before her death, he made a diagnosis of bubonic plague using material extracted from her swelling. Later, an autopsy confirmed the presence of plague as well as venereal syphilis.

37. **Miyo (Moiyo) Ikeda**, 26, Japanese female prostitute, died at the same lodging house on July 9, 1901. Like Shina Tagaki (case 36), she apparently had worked there for about a year. When visited by a Western health official, she was already in a febrile stupor, displaying a large bubo on the right groin. Autopsy findings and diagnosis were similar to those of Shina.

38. **Ume (Kawamura)**, 22, Japanese female prostitute, presented with similar complaints as her two co-workers except that her painful buboes were located inside her right armpit. A blood specimen obtained by Western health officials disclosed the presence of plague bacilli. Although believed to be moribund, Ume slowly recovered, the first case followed clinically that managed to survive the deadly illness.

39. **Fuku Inaki**, 24, Japanese female prostitute, had fled the Yoshiwara House before quarantine regulations went into effect and closed the establishment. She sought refuge in another lodging house located on 526 Pine Street, where she died on July 11, nearly forty-six hours after her first symptoms of fever and the appearance of a painful bubo the size of an egg on her right groin. Her attending Western physician had given her Yersin anti-pest serum, but the treatment came too late. Her body was returned to her original address. An autopsy disclosed evidence of plague and venereal syphilis. All four cases from Yoshiwara House were reported to federal, state, and local authorities, creating further tensions and disputes among officials.

40. **Lee Mon Chou**, 40, Chinese male cigar maker, died in the Oso Cigar Factory located at 618 Dupont Street on August 31, 1901. He worked there with a dozen men, but all had vanished from the premises after his death, fearing quarantine detention; nobody provided information about him. A complete autopsy revealed the presence of buboes in the left groin and right armpit. A portion of his right lung was also inflamed. The cause of death was ruled bubonic plague.

41. **Ng Chan**, 28, Chinese male clerk working in the Fook Lung grocery store at 821 Washington Street, fell ill in its basement, an area partitioned by boxes to house about fifteen people, all sleeping in small bunks. He was taken to the Tung Wah Dispensary on September 11, 1901, with a high fever and tender bubo located inside the right groin, and immediately placed in isolation. There was no evidence for venereal disease, but a friend of the patient refused federal health officials permission to obtain a blood sample from his bubonic swelling. There were even plans to secretly remove him to a Sacramento River ranch. After three weeks, the recovering patient finally allowed physicians to puncture his lesion, but laboratory results were negative. Based on the clinical picture, however, Ng was included in the official tally as a case of bubonic plague.

42. **Tom Chin Fat**, 35, Chinese male cook, died September 14, 1901, at 125 Waverly Place. He apparently had lived in California for twenty-four years, but no further information could be obtained. The autopsy disclosed a large mass of infected and bleeding lymph nodes extending from the left groin to the lower abdomen that were confirmed to contain plague bacilli.
43. **Alexander Winters**, 50, white male sailor, was admitted to San Francisco's Marine Hospital on September 13, 1901. He had been employed on the local schooner *Brothers* carrying powder from the California Powder Works to the city. More than a week earlier, he became ill suddenly on board the vessel, suffering from chills, fever, and vomiting. This was followed by the appearance of a very painful swelling in the right groin. Back in San Francisco, Winters had lodged at the France House before being driven to the hospital. A pure culture of plague bacilli was obtained employing fluid aspirated from the bubo, but the patient gradually improved and eventually recovered. In spite of their efforts, federal health officials failed to connect the patient to Chinatown, particularly its opium dens and houses of prostitution.
44. **Mrs. (Frau) Sagau**, 53, white female and washerwoman, native of Bavaria and living at 628 Broadway, died on September 27, 1901, at the German Hospital. Three days earlier, she had suddenly become ill. After socializing with her customers, neighbors, and residents of the Hotel Europa, she had a fainting spell, followed by chills, fever, and vomiting. With her conditions rapidly deteriorating, she was brought to the hospital suspected of suffering from a gynecological condition, a uterine hemorrhage. When a bubo was discovered inside her right groin, she was immediately placed in isolation and died there the next day. A complete autopsy confirmed the presence of buboes and an expansion of the infection into her abdomen. The final diagnosis was bubonic plague. The authorities linked the case to Chinatown: her husband was a garbage collector and teamster frequently operating in the district, and the Europa Hotel was located just a block north of Chinatown, a distance easily covered by plague-infected rats.
45. **Lee Wing See**, 49, Chinese male, owner of a cigar factory, died at 12 Spofford Alley on September 27, 1901. He had not been out of the city for a month when he was suddenly stricken. An autopsy detected hemorrhagic spots under the skin over arms, chest, and abdomen and buboes in the right groin. Besides plague, the deceased also suffered from liver cirrhosis.
46. **Chew Ban Yuen**, 40, Chinese male cook, died September 29, 1901. After recently arriving by steamship from Alaska where he was employed in a cannery, Chew lived in one of the worst Chinatown tenement houses, located at 109 Waverly Place. No other details were available, as two other men living in the same room escaped to avoid being questioned and quarantined. A postmortem and laboratory examinations discovered tuberculosis in both lungs, a venereal wart, streptococcal throat infection, and plague present in his neck lymph nodes.
47. **Wo Tai**, 50, Chinese male stevedore, died October 10, 1901, at 109 Waverly Place, the same place as Chew Ban Yuen (case 46). He was a foreman for a gang of

workers employed at the Pacific Mail Dock but also kept a hardware store in the basement living quarters considered "totally unfit for human habitation." No other details about his illness were known. The autopsy discovered a distinct bubo inside his left groin showing necrosis and hemorrhages; it was found to be positive for plague bacilli.

48. **Lee Jew Hen**, 40, Chinese male steward, died on October 19, 1901, at 809 Stockton Street, the address of the Savoy Hotel. Prior to his death, the city bacteriologist came to examine him, based on a tip from federal officials. Lee gave a history of being sick for about a week with high fever, chills, prostration, and swelling on the left side of his neck. Blood removed from a puncture of this lesion revealed the presence of plague bacilli, but the patient died a few hours after the medical visit. The autopsy and samples from lymph nodes around the neck confirmed the initial diagnosis.

49. **Chin Few**, 26, Chinese male lottery assistant, was the first case seen by both local and federal health officials in his third-floor room of the old Palace Hotel on Jackson Street on October 22, 1901. He suffered from fever and complained of a painful bubo in his left groin area. On examination, the patient seemed to have dullness in both upper lungs. Although the clinical diagnosis was bubonic plague, no confirmatory laboratory studies were allowed. The reason was that some of his relatives, who claimed that he suffered from rheumatism, had gone to federal court to seek an injunction to free him. Chin was therefore isolated in his hotel room, with policemen guarding the premises. Chin's strength gradually returned, and the bubo disappeared, prompting his discharge from the quarantine almost two weeks later, on November 4. This appeared to be the first officially reported bubonic plague case where the diagnosis was made on clinical grounds without corroborating laboratory findings.

50. **Fong Chin**, 38, Chinese male barber, died in a shop located at the corner of Waverly Place and Clay Street on October 30, 1901. No further details became available. The postmortem revealed a large bubo in the right groin, signs of gonorrhea, and extensive tubercular lesions in both lungs. All three conditions were confirmed in the laboratory.

51. **Mar Hea**, 43, Chinese male barber, died November 4, 1901. He had worked and slept at the same barbershop at 106 Waverly Place where Fong Chin (case 50) had recently died. Mar hailed from Sacramento and had been sick for three days before being moved to another nearby basement, where he died. A complete autopsy failed to discover any buboes, but the enlarged spleen suggested a state of infection confirmed by bacteriological studies to be plague.

52. **Huie Jin**, 24, Chinese male clerk from Sacramento who lived at 1025 Dupont Street, became sick and displayed swollen lymph nodes suspicious of bubonic plague. He was reported to the authorities on December 12, 1901, but refused to submit blood samples and was confined to his room. Four days later, the patient allowed state health inspectors to take a sample from his bubo, which yielded plague bacilli; he remained quarantined. Further attempts to obtain samples and

monitor the progress of his disease were rebuffed; in fact, the Chinese leadership, with the help of prominent lawyers, made a habeas corpus request to force his release. As the court proceedings dragged on, a recuperating Huie was eventually released from his domestic isolation on February 14, 1902.

1902

53. **Chung Mang Chee**, 56, Chinese male laundryman, died on February 22, 1902. He apparently had just arrived from Berkeley the prior afternoon and was taken by wagon to a Chinese laundry at 737 Pacific Street where he was refused entry. Instead, the man was brought to Main Fook's nearby coffin shop at 742 Pacific Street, where he died an hour later. After the health authorities were notified, the body was transferred to the Marine Hospital Service morgue for a complete autopsy. No buboes were found, but bacteriological tests indicated the presence of plague bacilli.
54. **Chin Suey Kim**, 30, Chinese male ranch laborer, died on April 20, 1902. Feeling ill, he took a Southern Pacific train from Davisville on April 17, seeking medical treatment in Chinatown. Like Chung Mang Chee (case 53), he also ended up in Main Fook's undertaker establishment, where he died. An autopsy disclosed generalized inflammation, and laboratory studies from lymph nodes confirmed septicemic plague. Health officials expressed fears that Chinatown was being periodically reinfected from the outside, and visits to Davisville revealed that the deceased was a member of a Chinese labor gang working on a nearby ranch. However, none of the others seemed affected.
55. **Lee Mong**, 46, Chinese male editor working for the Horn Hong Newspaper Company, died May 19, 1902, at 731 Washington Street. No further details were forthcoming, largely because the Chinese leadership and members of the state health board worked together to frustrate local and federal health officials in their effort to locate more plague cases. Autopsy and laboratory findings from several blood and tissue samples certified the plague diagnosis.
56. **Chin Kee**, 21, Chinese male bill collector who lived at 811 Jackson Street, died on May 25, 1902. Like Lee Mong (case 55), this man worked at the Horn Hong Newspaper Company, which managed both the paper and telephone exchange opposite Fish Alley. Before Chin's death, a former San Francisco Health Board member who suspected plague had seen him and a sick child in the same house. When the health authorities arrived, the child was quickly removed by other residents and hidden away. Since the Chinese leadership objected to an autopsy of Chin's body, only an inspection and tissue samples from an armpit bubo were obtained, to avoid further legal confrontations. Once again, the laboratory confirmed a case of bubonic plague.
57. **Hong Quai**, 4, Chinese male, nephew of Chin Kee (case 56) and believed to have been infected by him, died May 29, 1902. He had become sick on May 23 and was also seen by a former local health official. When Chin Kee died, the seriously

ill Hong was removed to another part of Chinatown and hidden in Main Fook's coffin shop. State health officials working for the Chinese leadership attempted to delay the autopsy to prevent a proper bacteriological diagnosis, but animal inoculations confirmed the presence of plague bacilli.

58. **Chen Guie**, 32, Chinese male, lived at 915 Stockton Street and worked at various clubs. He was under treatment at the Tung Wah Dispensary for a venereal disease and returned to the clinic on July 13, 1902, sweating profusely, unsteady on his feet. Shortly thereafter, he collapsed and died there. An autopsy conducted on his body discovered enlarged and hemorrhagic lymph nodes in his left leg, and the diagnosis of bubonic plague was bacteriologically confirmed in spite of challenges from other hospital physicians and state health inspectors.

59. **Leong Ngan**, 27, Chinese male cook, died on July 18, 1902. Feeling sick, he had left San Jose about a week earlier, seeking shelter in the basement of Wong Loy Kuen's Chinatown restaurant at 632 Jackson Street, where he had worked previously. As his condition worsened, he was brought to the Tung Wah Dispensary, where a federal health official examined him for possible buboes. None were found, but the patient was isolated from others as a precaution. He died a few hours later. An autopsy showed extensive inflammation of lymph nodes in arms and legs and signs of possible septicemia. All laboratory studies confirmed the presence of plague.

60. **Yee Woon Chun**, 48, Chinese male cigar maker living at 735 Jackson Street, near Leong Ngan (case 59), died on July 19, 1902. His body was promptly removed to an undertaker's establishment and examined by health officials summoned to the premises. An examination revealed armpit and groin swellings suggesting bubonic plague. A subsequent autopsy confirmed these findings, and laboratory results certified the presence of plague bacteria.

61. **Chew Hork**, 45, Chinese male, died on July 20, 1902. He had arrived sick from Stockton two days earlier and got a room in a tenement house at 737 Jackson Street. On the day of his death, he was taken to the Tung Wah Dispensary with symptoms compatible with pneumonia. There, local and federal health officials examined him. The patient's bloody sputum contained plague bacilli, leading the authorities to close and quarantine the entire hospital station policemen in front of the building. A subsequent autopsy showed typical buboes as well as diffuse bronchopneumonia affecting both lungs. Laboratory confirmation: bubonic plague.

62. **Fung Chin**, 26, Chinese female, died on August 6, 1902, at 16 Ross Alley after being ill for four days, suffering from a very painful bubo, high fever, and diarrhea. Several Western physicians practicing in Chinatown attended this patient and signed her death certificate as "acute nephritis." Confronted by local health officials, the husband initially refused to give permission for the body to be removed to the federal morgue. Eventually an autopsy was performed, revealing the presence of enlarged and bloody lymph nodes in the right femoral and iliac regions of the body. Here again, laboratory studies were positive for plague.

63. **Gee Ha Yen**, 25, Chinese male, died on August 17, 1902, at 116 Waverly Place. No information about the circumstances of his illness and death could be elicited.

The body was brought to the federal morgue for a postmortem examination, once more delayed because of wrangling between state and Marine Hospital Service officials. The eventual dissection uncovered the presence of a bubo in the right armpit and other inflammatory signs compatible with plague, which the laboratory confirmed.

64. **Yam Ching**, 45, Chinese male living at 742 Washington Street, died August 19, 1902. Like Lee Mong (case 55) and Chin Kee (case 56), he was also employed at the Horn Hong Newspaper Company, but no information about his background was made available to the authorities. An autopsy that same day disclosed a large bubo on the right side of the neck and a swollen spleen. The final diagnosis was bubonic plague.

65. **Leong Toy**, 45, Chinese male cook working in Bartlett Alley, died at 722 Jackson Street on August 19, 1902. The death occurred in the same building where the merchant Chun Way Lung (case 23) perished in January 1901. The autopsy, conducted a day later at the federal morgue, showed swollen and hemorrhagic lymph nodes in the right groin, containing ample plague bacilli.

66. **Soo Wing**, 35, Chinese male who lived at 636 Pacific Street, died on August 20, 1902. No physician or health official saw him before his death. An autopsy discovered typical bubonic lesions certified by laboratory studies.

67. **Quong Kum**, 29, Chinese male who lived at 918 Dupont Street, died August 22, 1901. The autopsy revealed an acute infection in the lungs and spleen leading to a diagnosis of pneumonic plague, a highly infective manifestation of the disease verified by animal inoculations.

68. **Lee Ying Ming**, 57, Chinese male living next door to Quong Kum (case 67), died on August 23, 1902. He, also, was not seen before his death. Like his neighbor, the autopsy showed plague infection, but more localized around a left groin bubo containing many plague bacilli. Confronted with a rapidly accelerating number of cases, nervous health officials feared an imminent epidemic.

69. **Tang Hung Fong**, 35, Chinese male, died on August 26, 1902, at 1025 Dupont Street. A federal health official had seen him a day earlier, complaining of a sore throat, but bloody sputum showed plague bacilli. An autopsy confirmed tonsilar and early pneumonic plague as well as previous scars from pulmonary tuberculosis. The laboratory certified both diagnoses.

70. **Dong Hip**, 42, Chinese male clerk who lived at 605 Jackson Street, died on August 30, 1902. He worked at a liquor store and had been sick for three or four days, suffering from chills and a high fever. The postmortem dissection showed subcutaneous hemorrhages scattered over the chest, arms, and forearms, together with signs of Chinese counter-irritation cuts performed before he died. The body also exhibited black ointment over a bubo located inside the left groin. The laboratory studies confirmed the cause of death as bubonic plague.

71. **Lin Hea**, 35, Chinese female living at 827 Sacramento Street, died on September 1, 1901. Weak and delirious, she had been examined the day before by a federal health official, who found a left groin bubo. This patient had also been subjected to counter-irritation treatments. The autopsy confirmed the plague lesion but also

discovered a parasitic infection—clonarchiasis—that had infected her biliary tract and severely damaged the liver. All findings were supported by bacteriology.

72. **Leong Chong**, 54, Chinese male from 810 Jackson Street, died September 2, 1902. Nobody had seen this man before he died. A postmortem found acutely inflamed lymph nodes on the left side of his body together with cardiac valvular lesions and the presence of liver flukes similar to those of Lin Hea (case 71). The final diagnosis was bubonic plague.

73. **Chin Mong Yung Shee**, 33, Chinese female, died September 9, 1902, at 40 Fish Alley from a suspicious fever and a bubo inside the right side of her neck. A 17-year-old boy exposed to this patient and apparently also sick with buboes was immediately removed from the house to avoid a quarantine and disinfection. He was transported to Oakland where he was said to have died three days later. A dissection revealed the buboes, and there were also signs of acute hepatitis and a left ovarian cyst. The laboratory authenticated another case of bubonic plague.

74. **Ng Chew Ho**, 25, Chinese male living at 730 Washington Street, died on September 10, 1902. Lacking information, a postmortem examination was ordered. The dissection established the fact that the patient suffered from a large bubo inside the left groin area and had tuberculosis in both lungs and liver flukes in the biliary ducts of his liver. The primary cause of death, however, was bubonic plague. Bacteriological studies found plague bacilli in all secured tissue samples.

75. **Lau Hock Ching**, 58, Chinese male living at 742 Washington Street, died September 16, 1902. Like most sick Chinatown dwellers, he was not reported to the Chinese or local authorities. An autopsy found palpable lymph nodes in the groin and armpits together with liver flukes in some bile ducts. The tonsils were also enlarged and covered with membranes. The laboratory verdict was bubonic plague and clonarchiasis.

76. **Chin Hong Mon**, 47, Chinese male, died September 16, 1902, at 800 Washington Street after a brief illness. The postmortem uncovered widespread inflammatory changes in lymph nodes located inside the right leg and back. Old adhesions suggested a previous lung infection. Smears and bacteriological cultures confirmed the presence of plague bacilli.

77. **Lee Gong**, 48, Chinese male from 10 Waverly Place, died September 20, 1902. An autopsy showed a bubo the size of a pigeon's egg located in the left groin. Lymph nodes around the neck were similarly inflamed and hemorrhagic. An enlarged heart with thickening of the valves suggested decreased cardiac function. Laboratory findings certified the presence of plague organisms.

78. **Huie Chong Bow**, 36, Chinese male, died September 23, 1902, at 808 Sacramento Street. (He was said to be from Oakland.) The dissection showed extensive inflammatory changes in lymph nodes—including a bubo in the left groin—and a soft spleen, all containing large amounts of plague bacilli.

79. **Gam Fong**, 51, Chinese female—cook by day and gambler by night—who lived at 904 Dupont Street, died on September 25, 1902. Reported to the authorities two days earlier, she was seen by the city bacteriologist, who discovered a tender bubo

located inside the right groin area. Following her demise, an autopsy confirmed the lymphatic infection that extended into the abdominal cavity. There were also signs of myocarditis and nephritis; a swollen liver revealed the presence of liver flukes. The cause of death was recorded as bubonic plague.

80. **Chin Kung Poo**, 38, Chinese male, died September 26, 1902, at 19 Prospect Place. Without further information about the nature of his sickness, a postmortem exam was ordered to establish his cause of death. Like most of the recently reported cases, examiners searched the body for signs of inflamed and necrotic lymph glands, which were amply present around the pancreas, spleen, and groin. The liver was severely compromised, allowing for the retrieval of nearly 150 liver flukes from the biliary ducts. Bacteriological studies concluded that the patient had died of plague but was severely afflicted with a common Asian parasitic disease, clonarchiasis.

81. **Hoo Chung**, 38, Chinese male from 1018 Stockton Street, died September 26, 1902. The postmortem dissection exhibited a well-established bubo in the right groin, with the hemorrhagic lymph nodes also extending into the abdominal cavity and almost reaching the diaphragm. There was also an infection in the right testicle—probably venereal—and early signs of atheromatous plaques in the aorta. About six hundred flukes were counted in dilated and inflamed bile ducts, indicating another case of clonarchiasis. Bubonic plague was recorded as cause of death.

82. **Yee Foo Lai**, 52, Chinese male, died at 724 Commercial Street on October 4, 1902. Like many earlier plague cases, this individual appeared well nourished, but the autopsy revealed a visible bubo located near the right groin. Further inflammatory involvement was detected in the armpits and around the stomach. This became another bacteriologically confirmed case of bubonic plague.

83. **Chew Led**, 28, Chinese male residing at 811 Clay Street, died October 5, 1902. The autopsy showed the same signs as previous cases, with a bubo inside the right armpit and hemorrhagic and necrotic changes in lymph nodes elsewhere characteristic of bubonic plague.

84. **Chew Mon Keock Shee**, 27, Chinese female, was found dead at 838 Dupont Street on October 5, 1902. The postmortem dissection exposed a large mass inside the right groin with heart, spleen, liver, and kidneys showing signs of generalized infection. Once more, the laboratory and animal inoculations confirmed the presence of plague bacilli in most tissue samples.

85. **Wong Chew Chong**, 54, Chinese male, died on October 8, 1902, at 753 Clay Street. In this case, the patient was reported to the federal health authorities a day before his death and clinically examined. Two buboes in the right groin and armpit suggested bubonic plague, and Wong was immediately quarantined. An autopsy confirmed the clinical assessment, demonstrating an advanced degree of lymphatic inflammation that tested positive for plague.

86. **Yee Pang Wo**, 36, Chinese male living at 767 Clay Street near Wong Chew Gong (case 85), died October 11, 1902. Responding to a report, a federal health inspector managed to visit the patient one hour before his death, discovering a

bubo in his right groin. During the postmortem dissection, the physicians exposed additional inflammatory lymph nodes in abdominal and lumbar tissues. Spleen, heart, and kidneys were also affected. In another case of infestation with *Clonorchis sinensis,* surgeons recovered about one hundred larval flukes from the inflamed biliary ducts. Cause of death was bubonic plague.

87. **One Yue Nom**, 48, Chinese male living at 615 Jackson Street, died on October 16, 1902, shortly after being brought to the Tung Wah Dispensary, where he was seen by a federal health official. The autopsy confirmed the clinical impression that the patient suffered from bubonic plague. Acute inflammatory changes in most vital organs and hemorrhagic lymph nodes in the right groin yielded plague bacilli. As in earlier cases, the liver showed clonorchiasis, but, according with animal inoculations, the death was attributed to plague.

88. **Hoo Hing Bong**, 47, Chinese male, died October 16, 1902, at 743 Clay Street. The postmortem, conducted a day later, uncovered the typical pathological changes, including a prominent bubo in the left groin and larval flukes. Cause of death was bubonic plague.

89. **Arthur W. Caswell**, 33, white male clerk working in a furniture store, called a physician to his house at 409 Turk Street on October 27, 1902. Three days earlier, he noticed an increasingly painful tumor growing in his right groin area. He was restless and nauseated and complained of backaches. Told to come immediately to the hospital for an examination and possible biopsy, Caswell was admitted to the City and County Hospital later that day. Tissue samples of the bubo confirmed the presence of plague bacilli, and he was given several doses of Yersin anti-pest serum. However, despite the treatments, he went into a coma and died on October 31, 1902. The autopsy exposed typical pathological changes of bubonic plague. Caswell was said to be "dissipated" in his habits, and his death was linked with presumed visits to Chinatown's forbidden pleasures.

90. **Wong Ngan**, 30, Chinese male living in the basement of a house at 37 Brenham Place, died November 16, 1902. A federal health officer had seen him a day earlier, as he was complaining of swollen tonsils, a large mass on the right side of his neck, and signs of respiratory distress. Sputum samples contained strep and plague bacilli. A postmortem dissection exposed inflamed lymph glands around the neck reaching the base of the tongue. Signs of an acute strep throat infection and bronchopneumonia together with older tubercular lesions in the lungs completed the pathological picture. The cause of death was determined to be pneumonic and septicemic plague.

91. **Wong Hoi**, 36, Chinese male, died November 19, 1902, at 7 Brenham Place. Reported to, and seen a day before by, local and federal health officials, the patient was found to have a very large bubo in his right groin with the swelling extending down to the knee. Similar but less severe swellings existed on his left leg. He was also coughing up blood that revealed the presence of plague bacilli. The clinical findings were confirmed during an autopsy and later certified by laboratory tests. The final diagnosis was bubonic and pneumonic plague.

92. **Leong Sen**, 50, Chinese male, died November 26, 1902, at 838 Washington Street. No information about his clinical condition could be elicited. An autopsy showed no buboes but widespread signs of bilateral bronchopneumonia. Plague bacilli were cultured from tissue samples. The cause of death was acute pneumonic plague.
93. **Deong Yuen Yum**, 38, Chinese male living at 726 Pacific Street, died on December 11, 1902. No medical professional attended the patient before death. The postmortem dissection revealed two skin lesions over the abdomen, bloody and inflamed, connected to lymph nodes in both groin areas. The lungs were also partly congested. Laboratory findings confirmed the cause of death as septicemic and bubonic plague.

1903

94. **A. I. Minegishi**, 21, Japanese female living at 520 Dupont Street in the Japanese district adjoining Chinatown, died March 16, 1903, and was reported to the San Francisco Health Department. An autopsy was performed the next day at the federal morgue, but no buboes were found. Yet the left groin area appeared inflamed and necrotic, and the patient had an enlarged spleen. There were scattered miliary tubercular lesions in both lungs. The cause of death was acute bubonic and septicemic plague, the first verified case in three months.
95. **Wong Tzse Hop**, 45, Chinese male laundryman and gambler, died June 5, 1903, at 27 Brenham Place. A long-time resident of Chinatown, he was an agent for a lottery company where he supposedly became sick. Reported to the authorities, he was seen by health officials just before his death. They were told that he had been suffering from a high fever and swollen glands for about five days and had been treated by a Chinese healer. This practitioner had painted a red compound between the patient's eyebrows and over the chest, the traditional "Hock san" treatment. A postmortem dissection confirmed the presence of a large bubo in the left groin and signs of generalized inflammation. The case was authenticated as bubonic and septicemic plague.
96. **Chin Guie**, 62, Chinese male widower living at 743 Jackson Street, was said to have died at least 24 hours before he was found during a medical inspection on July 14, 1903. No one had reported his death. He had recently worked at an asparagus-canning factory on Bouldin Island, but two weeks previously he had returned to Chinatown. The autopsy disclosed enlarged lymph nodes throughout the body, and tissue samples were subjected to a battery of bacteriological studies that eventually showed the presence of plague bacilli.
97. **Pietro Spadafora**, 35, white Italian male worker employed at the Southern Pacific yards, lived with his wife, mother, and two small children at 19 Jasper Place, an alley in the center of the densely populated Latin Quarter. He died on July 19, 1903, at the Southern Pacific Railroad Hospital on Mission Street. He used to walk through Chinatown on his way home, purchasing inexpensive vegetables, fruits,

and other goods from Chinese dealers. Four days before his death, he began to experience high fever and prostration that led to his eventual admission to the hospital, where he developed a bubo in his right groin. Suspected of plague, he was reported to the health authorities, who arrived too late for an examination. The postmortem confirmed the presence of inflamed lymph nodes and extensive left lung congestion. The laboratory verdict was bubonic plague.

98. **Pietra Brancato**, 60, Italian female divorcee and mother of Pietro, was found gravely ill at the Jasper Place address, suffering from symptoms similar to those that affected her son Pietro (case 97). She died on July 20, 1903, and an autopsy showed pathological changes compatible with bubonic, pneumonic, and septicemic plague. She also suffered from mitral stenosis of the heart and kidney disease. Both cases were the first instances of plague occurring among Sicilian immigrants living in the Latin Quarter, adjacent to Chinatown.

99. **Yee Ku Jin**, 44, Chinese male, died on July 29, 1903, in his room at 722 Jackson Street. No clinical history could be obtained. The postmortem dissection disclosed widespread inflammatory and hemorrhagic lymph nodes and a soft spleen suggestive of plague, which the laboratory eventually confirmed.

100. **Charles Bock**, 33, German male blacksmith, died at the German Hospital on August 10, 1903, and was reported to the health authorities the following day. Bock had lived in Pacheco and had been brought on a train to San Francisco by his brother for hospitalization. His illness had started six days earlier with high fever. He had not been in the city since the Fourth of July but recently had visited the town of Martinez to retrieve a shipment of hardwoods and iron brought by a steamer. The patient was in a semiconscious state on arrival and had dullness in both lower lobes of his lungs. A dissection revealed small, subcutaneous hemorrhages typical of plague infection in both arms, right chest, and abdomen, together with a bubo inside the right armpit. Lungs, liver, and spleen were also affected. Bacteriological studies confirmed bubonic, pneumonic, and septicemic plague.

101. **Wo Coey Chung**, 44, Chinese male, died on August 21, 1903, at 735 Commercial Street. Federal health officials conducted a postmortem examination that revealed inflamed lymph nodes and an enlarged spleen compatible with plague, which bacteriological tests confirmed.

102. **E. T. Slater**, 31, white Canadian male laborer, died on September 13, 1903, in the Southern Pacific Hospital on Mission Street. He worked as a bridge builder for a company in Danville and San Ramon. On August 31, he had visited Oakland and the ferry building in San Francisco, becoming sick a week later. On September 11, he was moved to the hospital suffering from high fever and a bubo in his armpit. With a presumptive diagnosis of bubonic plague, an autopsy conducted by federal health officials disclosed the typical petechial skin lesions and inflamed lymph nodes present in plague. Laboratory confirmation through bacteriological smears and animal inoculations followed. The linkage of both the Bock and Slater cases with Contra Costa County and its infected wild squirrels suggested a widening of the plague footprint in California.

103. **K. Imai**, 26, Japanese male living at 418-A Post Street, died on October 7, 1903, at the Japanese Hospital located at 505 Dupont Street. A Japanese surgeon had treated him for seven days before his death. The postmortem dissection revealed the usual manifestations of a generalized, acute infection that included lymph nodes, spleen, and kidneys. Bacteriological confirmation of bubonic and septicemic plague occurred two weeks later.
104. **Jung Mon Tzang Shee**, 23, Chinese female, died on October 20, 1903, at 30 Fish Alley. She had been ill for only four days, and a Western physician originally diagnosed her sickness as pneumonia. The case was only reported to the authorities after her death; an autopsy showed lesions in lungs, heart, spleen, and kidneys. Both lungs were congested and contained plague bacilli. Laboratory results became available three weeks later, confirming pneumonic and septicemic plague.
105. **Chin Lai**, 54, Chinese male actor living at 32 Fish Alley, was taken ill while performing in a dramatic play at a Chinese theater located at 623 Jackson Street. Signs of counter-irritation treatments and ointment application to a bubo in his left groin suggested that Chinese practitioners had treated the patient. He died on October 22, 1903, after being reported to the authorities. The postmortem dissection uncovered many inflamed lymph nodes as well as chronic edema of the lungs and signs of venereal disease. Cause of death was bubonic plague.
106. **Inouye Hideyoshi**, 15, Japanese male, died on October 24, 1903, at 334 Bush Street. The attending physician, Dr. Yoshida, reported the case to the authorities, and the autopsy at the federal morgue exposed all the typical signs of an acute and generalized plague infection, which was confirmed bacteriologically two weeks later.
107. **Lai Shew**, 57, Chinese male laborer, died suddenly on October 29, 1903, at 627 Jackson Street, near the Jackson Street Theater, which a sanitary crew had disinfected in response to the death of Chin Lai (case 105). A postmortem examination detected a prominent bubo in the body's left groin, covered by a tarry, black ointment probably administered by a Chinese practitioner. Congested lymph nodes and a soft spleen were also found. Verified by laboratory and animal inoculations, the cause of death was septicemic and bubonic plague.
108. **Slick Chat**, 7, Chinese female seen clinically by Western physicians and believed to suffer from plague, died on November 4, 1903, at 742 Washington Street. The diagnosis was confirmed during an autopsy performed by federal officials. Several infected lymphatic glands, especially around the neck, tonsils, and armpits, were exposed, together with changes in the spleen, kidneys, and lungs. Results from a final bacteriological study certified this case of bubonic and septicemic plague.
109. **Chew Soo**, 7, Chinese female who lived at 844 Washington Street, died November 7, 1903. Her parents reported the fatality to Wong Chung, who was working as an interpreter for the Marine Hospital Service and had been instrumental in gathering information about sick people in Chinatown. A partial autopsy provided sufficient evidence of general inflammation compatible with plague and

tissue samples submitted to the laboratory proved the presence of plague bacilli. Final diagnosis: septicemic plague.
110. **Ching Mon Tzer Shee**, 54, Chinese female, died on November 11, 1903, at 1016 Stockton Street. Her husband worked in the San Joaquin River Valley and had not visited her in a month. After the death was reported to the health authorities, they scheduled a postmortem examination, which unveiled a prominent bubonic lesion in the left groin, together with generalized lymphatic inflammation in most abdominal organs. Cause of death was septicemic and bubonic plague.

1904

111. **Ho Mon Chin Shee**, 26, Chinese female, died on January 10, 1904, at 628 Jackson Street. For a few days, she was a patient of a Western practitioner of high standing in the community, but she fell into a coma before a diagnosis could be made. A dissection provided samples from inflamed lungs, lymph nodes, and spleen that confirmed the presence of plague bacilli by January 27. This became the first bubonic plague case of the year, after an interval of nearly two months.
112. **Lee Won Wing**, 62, Chinese male seasonal laborer who lived at 624 Jackson Street, died January 11, 1904, before being seen by federal physicians. Two days before his death, the sick man apparently arrived from Hayward, where he had worked on a cucumber ranch since the previous May. A postmortem investigation discovered necrosis and hemorrhagic changes in the spleen and lymph nodes suggestive of a generalized infection. In addition, the patient suffered from acute appendicitis, chronic kidney disease, and pulmonary emphysema. Bacteriological studies confirmed the plague diagnosis on January 27.
113. **Lee Ngin Lew**, 61, Chinese male worker, died on January 13, 1904, at the Tung Wah Dispensary. He was a long-time resident of Chinatown, living at 18 Fish Alley, although friends attempted to conceal that fact by claiming he had just arrived from Martinez. The Fish Alley area was notorious, with several plague cases detected in ground-floor apartments and cellars there in 1903. Lee was admitted to the hospital and died before being examined the next morning. The autopsy findings suggested plague septicemia as well as chronic emphysema of the lungs and diffuse nephritis with kidney stones. Bacteriological studies certified the presence of plague bacilli.
114. **Katie Cuka**, 18, white female living at 558-A Natoma Street, suddenly became ill on January 28, 1904, at the Woods Clothing Factory at 27 Geary Boulevard. She fainted after having a chill and was brought to her home, then transferred to the French Hospital. Staff physicians noticed the presence of a suspicious swelling in her groin suggestive of bubonic plague, which they confirmed from a tissue sample. She was hastily discharged during the night and sent back home to prevent an institutional quarantine. In early February, rumors of her condition reached local and federal health officials, who decided to readmit the patient to the isolation cottage of the City and County Hospital. There, another sample from the enlarged

bubo was removed for smears and bacteriological examinations that confirmed the presence of plague. Cuka slowly recovered and was discharged from the hospital by March 14.

115. **Irene Rossi**, 18, white female, died February 8, 1904, at 6 Varrennes Street in the Latin Quarter, an alley a block away from Jasper Place, site of two official plague cases (cases 97 and 98). Like Katie Cuka, Irene worked in the Woods Clothing Factory, a fact that came to light when the foreman checked his sick list at the request of the health inspectors. These officials delayed the funeral and negotiated with her parents to conduct a partial dissection. Samples of lymph node tissue appeared to show some plague bacilli, but portions of her left lung displayed signs of pneumonia. At the conclusion of all bacteriological studies on February 27, the final diagnosis was pneumonic plague with secondary bubonic lesions.

116. **Giuseppe Rossi**, 54, Italian peddler, and father of Irene (case 115), died late at night on February 12, 1904, at 6 Varrennes Street. He had insisted on his right to attend the postmortem examination of his daughter, although he was already quite sick at that time. The postmortem dissection showed bronchopneumonia in portions of both lungs. The case was subsequently confirmed as septicemic and pneumonic plague. Survivors in the Rossi family, including his wife, Luisa, immediately received doses of Yersin anti-pest serum as a precautionary measure.

117. **Fung Bu**, 42, Chinese male gambler, died February 14, 1904, at 714 Jackson Street. Like several others before him, his illness was first reported to the Chinese Six Companies, but no Western physician was notified or visited the patient. The body was sent to the federal morgue for an autopsy the day after he died. The pathological findings were typical for plague, with widespread lymph node inflammation involving the groin, armpit, neck, and tonsils. There was also a tubercular infiltration at the apex of the right lung. Animal inoculations confirmed plague on February 24.

118. **Luisa Rossi**, 33, white female and widow of Giuseppe (case 116), died February 19, 1904, at City and County Hospital. Despite receiving doses of Yersin anti-pest serum, she had fallen ill on February 17 in the house of her brother, Joseph, in the Richmond district of San Francisco. Examined by a private physician and reported to the authorities, she was diagnosed with pneumonic plague after some positive sputum cultures, and then promptly sent to the municipal hospital's isolation pavilion. A postmortem examination confirmed pneumonia in both lungs as well as acute nephritis and degeneration of the liver. The case was bacteriologically confirmed on March 8 as pneumonic and bubonic plague. Suspected of being infected, her brother was transferred to the same isolation pavilion since he had a fever and tender lymph glands in the groin and armpit. Joseph Rossi steadfastly refused to be tested for plague but received doses of anti-pest serum and recovered by early March. Since there was no bacteriological confirmation, his diagnosis remained doubtful, and his case was not included in the final official count.

119. **Mrs. Frank Soto**, 39, white female, died in or near Concord, California, on February 29, 1904. The case was first reported to federal authorities by a local

health official the next day. Some tissue samples from the armpits were secured after the woman's death, but little information could be obtained. The family was ethnically Hispanic and Celt; they resented the plague diagnosis. According to her husband, the patient had not left her home in months. With bacteriological studies certifying the presence of plague, this woman was considered the first genuine case outside of San Francisco, but she was still included in the official tally. No further persons suffering from plague were found or reported for the next two years, signaling the end of the epidemic.

Notes

Abbreviations

BHM	*Bulletin of the History of Medicine*
CSJM	*California State Journal of Medicine*
CSYP	*Chung Sai Yat Po*
JAMA	*Journal of the American Medical Association*
OMT	*Occidental Medical Times*
RPHS	Central Files, 1897–1923, Records of the Public Health Service, Record Group 90, National Archives, College Park, MD

Introduction

1. See Philip Alcabes, *Dread: How Fear and Fantasy Have Fueled Epidemics from the Black Death to the Avian Flu* (New York: Public Affairs, 2009).

2. For primary sources, consult the virtual archive *The Chinese in California: 1850–1925*, including documents assembled by the University of California, Berkeley, and the California Historical Society in 2003, www.oac.cdlib.org.

3. See Kyle Ward, *Not Written in Stone: Learning and Unlearning American History through 200 Years of Textbooks* (New York: New Press, 2010).

4. Sucheng Chan, "Chinese American Historiography: What Difference Has the Asian American Movement Made?" in *Chinese Americans and their Politics of Race and Culture*, ed. S. Chan and M. Y. Hsu (Philadelphia: Temple Univ. Press, 2008), 1–61.

5. See American Historical Association, "Conversation on Transnational History," *American Historical Review* 111 (Dec. 2006): 1441–63.

6. Peter Baehr, "Social Extremity, Communities of Fate, and the Sociology of SARS," *European Journal of Sociology* 46 (2005): 179–211.

7. Yong Chen, *Chinese San Francisco, 1850–1943: A Transpacific Community* (Stanford, CA: Stanford Univ. Press, 2000), 1–10.

8. Peter Kwong and Dusanka Miscevic, *Chinese America: The Untold Story of America's Oldest New Community* (New York: New Press, 2005), 95–134.

9. Madeline Yuan-yin Hsu, *Dreaming of Gold, Dreaming of Home: Transnationalism and Migration between the United States and South China, 1882–1943* (Stanford, CA: Stanford Univ. Press, 2000), 1–15.

10. This pejorative term was widely employed for framing exclusionary policies because it characterized individuals as temporary visitors unwilling to assimilate into American culture; Kwong and Miscevic, *Chinese America*, 97.

11. The social control model was inspired by the writings of Michel Foucault. See, for example, his *Discipline and Punish: The Birth of the Prison* (New York: Vintage, 1995), 195–228.

12. See Christopher Bassford, "Clausewitz and His Works," Apr. 20, 2002, www.clausewitz.com/readings/Bassford/Cworks/Works.htm, and his book *Clausewitz in English: The Reception of Clausewitz in Britain and America, 1815–1945* (New York: Oxford Univ. Press), 1994.

13. See essays in *Contagion: Historical and Cultural Studies*, ed. Alison Bashford and Claire Hooker (London: Routledge, 2001).

14. "Airs, Waters, and Places," in *Hippocratic Writings*, ed. G. E. R. Lloyd, trans. J. Chadwick and W. N. Mann (Harmondsworth, UK: Penguin, 1978), 162–67.

15. See Audrey Smeley, *Race in North America: Origin and Evolution of a Worldview* (Boulder, CO: Westview, 2007), 161–76. See also Arthur O. Lovejoy, *The Great Chain of Being: A Study of the History of an Idea* (Cambridge, MA: Harvard Univ. Press, 1976).

16. Quoted in Nell I. Painter, *The History of White People* (New York: W. W. Norton, 2010), 43–44. Bernier (1625–88), the writer in question, was a graduate of Montpelier.

17. Ivan Hannaford, *Race: The History of an Idea in the West* (Baltimore: Johns Hopkins Univ. Press, 1996), 5. A comprehensive treatment of the subject published after the completion of this book is Michael Keevak, *Becoming Yellow: A Short History of Racial Thinking* (Princeton, NJ: Princeton Univ. Press, 2011).

18. Johann F. Blumenbach (1752–1840) was professor at the University of Göttingen. His book on the natural variety of humankind was originally published in Latin in 1775. The last version of 1795 is available in English translation as *The Anthropological Treatises of Johann F. Blumenbach* (London: Longman, Green, Roberts, and Green, 1865).

19. The colleague was Christoph Meiners (1747–1811), who also taught at Göttingen. In 1811, his *Examinations Concerning the Differences of Human Natures* was published posthumously. See Frank W. P. Dougherty, "Christoph Meiners and Johann F. Blumenbach im Streit um den Begriff der Menschenrasse," in *Die Natur der Menschen: Problem der physischen Anthropologie und Rassenkunde (1750–1850)*, ed. G. Mann, J. Benedum, and W. Kümmel (Stuttgart: G. Fischer, 1990), 89–111.

20. See Loring C. Brace, *"Race" Is a Four-Letter Word: The Genesis of the Concept* (New York: Oxford Univ. Press, 2005), 44–47.

21. Nell I. Painter, "Why White People Are Called Caucasian" (paper delivered at Collective Degradation: Slavery and the Construction of Race, Gilder Lehrman Center for the Study of Slavery, Resistance, and Abolition Fifth International Conference, Yale University, New Haven, CT, Nov. 8, 2003, available at www.yale.edu/glc/events/race/schedule.htm). See also *History of White People*.

22. From the Latin *degenero,* "departure from the original." A French naturalist, George L. Leclerc, Comte de Buffon (1707–88), elaborated the notion that species were subjected to improvement or degeneration following their dispersal into particular regions and environments around the globe.

23. A. Smedley, "Race and the Construction of Human Identity," *American Anthropology* 100 (1998): 700.

24. For Robert Knox (1793–1863), the Scottish anatomist, the Anglo-Saxon race was endowed with superior qualities. See H. F. Augstein, introduction to *Race: The Origins of an Idea, 1760–1850,* ed. H. F. Augstein (Bristol, UK: Thoemmes, 1996), ix–xxxiii.

25. The study was conducted by C. H. Bond and reported in *Nature* 50, no. 1283 (May 31, 1894): 111.

26. *Oakland Daily News,* Mar. 31, 1876, reporting on an Oakland City Hall meeting. This source is cited in Anna N. Naruta, "Creating Whiteness in America: Racialization Processes, Land, and Policy in the Context of California's Chinese Exclusion Movements, 1850–1910" (Ph.D. diss., University of California, Berkeley, 2006), 63–64.

27. Keevak, *Becoming Yellow,* 52–54.

28. Such ideas were primarily popularized by Augustin Morel (1809–73) and Richard von Kraft-Ebing (1840–1910).

29. Hannaford, *Race,* 206–8.

30. More information on this process can be found in Thomas F. Gossett, *Race: The History of an Idea in America* (New York: Oxford Univ. Press, 1997).

31. See details in J. C. Nott and George Gliddon, *Indigenous Races of the Earth* (Philadelphia, 1857).

32. Frank Norris, *Moran of the Lady Letty* (New York, 1898), 24. The epicanthic skin fold covers the upper eyelid, narrowing the inner curve of the eye.

33. Hubert H. Bancroft, "Mongolianism in America," in *Essays and Miscellany* (San Francisco, 1890), 309. A collector and historian, Bancroft's racial opinions were typical of the times.

34. 47 Cong. Rec. 1,582 (1882) (statement of Sen. Farley).

35. K. Calavita, "The Paradoxes of Race, Class, Identity and 'Passing': Enforcing the Chinese Exclusion Acts, 1882–1910," *Law and Social Inquiry* 25 (2000): 1–40.

36. Aaron M. Sakolski, *The Great American Land Bubble* (New York: Harper and Brothers, 1932), 255–62.

37. Georges Vigarello, *Concepts of Cleanliness: Changing Attitudes in France since the Middle Ages,* trans. J. Birrell (New York: Cambridge Univ. Press, 1988), 140–41.

38. For details, see Pamela K. Gilbert, *Cholera and Nation: Doctoring the Social Body in Victorian England* (Albany: State Univ. of New York Press, 2008).

39. Edwin Chadwick, *Report on the Sanitary Condition of the Labouring Population of Great Britain, 1842,* ed. M. W. Flinn (Edinburgh: Edinburgh University Press, 1965).

40. For details, see Christopher Hamlin, *Public Health and Social Justice in the Age of Chadwick: Britain, 1800–1854* (New York: Cambridge Univ. Press, 1998).

41. C. Hannaway, "Environment and Miasmata," in *Companion Encyclopedia of the History of Medicine,* ed. W. F. Bynum and R. Porter, 2 vols. (London: Routledge, 1993), 1:292–308.

42. For details, see Vivian Nutton, "The Reception of Fracastoro's Theory of Contagion," *Osiris* 6 (1990): 196–234.

43. E. H. Ackerknecht, "Anticontagionism between 1821 and 1867," *BHM* 22 (1948): 562–93.

44. See Sandra Hempel, *The Strange Case of the Broad Street Pump: John Snow and the Mystery of Cholera* (Berkeley: Univ. of California Press, 2007).

45. Christopher Hamlin, *Public Health and Social Justice in the Age of Chadwick: Britain, 1800–1854* (New York: Cambridge Univ. Press, 1998), 15.

46. For details, see Edwin Chadwick, *Public Health, Sanitation and Its Reform,* with introduction by David Gladstone (London: Routledge/Thoemmes, 1997). A good general reference is Dorothy Porter, *Health, Civilization, and the State: A History of Public Health from Ancient to Modern Times* (London: Routledge, 1999).

47. See Pamela K. Gilbert, *Cholera and the Nation: Doctoring the Social Body in Victorian England* (Albany, NY: State Univ. of New York Press, 2008).

48. Michelle Allen, "From Cesspool to Sewer: Sanitary Reform and the Rhetoric of Resistance, 1848–1880," *Victorian Literature and Culture* 30 (2002): 383–402.

49. M. McPhee, "Deodorized Culture," *Arizona Anthropologist* 8 (1992): 25–45.

50. Martin F. Manalansan IV, "Immigrant Lives and the Politics of Olfaction in the Global City," in *The Smell Culture Reader,* ed. Jim Drobnik (New York: Berg, 2006), 41–52.

51. D. S. Barnes, "Confronting Sensory Crisis in the Great Stinks of London and Paris," in *Filth: Dirt, Disgust, and Modern Life,* ed. William A. Cohen and Ryan Johnson (Minneapolis: Univ. of Minnesota Press, 2005), 103–29.

52. Susan Craddock, *City of Plagues: Disease, Poverty, and Deviance in San Francisco* (Minneapolis: Univ. of Minnesota Press, 2000), 124–47; Nayan Shah, *Contagious Divides: Epidemics and Race in San Francisco's Chinatown* (Berkeley: Univ. of California Press, 2001), esp. 120–57; Marilyn Chase, *The Barbary Plague in Victorian San Francisco* (New York: Random House, 2003).

53. The exception is James Mohr's balanced analysis, in which he engaged translators who systematically examined Hawaiian, Chinese, and Japanese-language sources. James C. Mohr, *Plague and Fire: Battling Black Death and the Burning of Honolulu's Chinatown* (New York: Oxford Univ. Press, 2005).

54. Susie Lan Cassell, "Introduction: One Hundred and Fifty Years of Chinese in America: The Politics of Polarity," in *The Chinese in America: A History from the Gold Mountain to the New Millennium,* ed. S. L Cassell (Walnut Creek, CA: AltaMira, 2002), 1–18.

55. Richard E. Nisbett, *The Geography of Thought: How Asians and Westerners Think Differently—and Why* (New York, Free Press, 2003), 87.

56. Gail Hershatter et al., eds., *Remapping China: Fissures in Historical Terrain* (Stanford, CA: Stanford Univ. Press, 1996), 1–9.

57. Ibid., 47–77.

58. *Chung Sai Yat Po* (hereafter *CSYP*), Aug. 20, 1906. For more details, see Yumei Sun, "From Isolation to Participation: *Chung Sai Yat Po* (*China West Daily*) and San Francisco's Chinatown, 1900–1920" (Ph.D. diss., Univ. of Maryland, 1999).

59. S. Wong Scollon, "Metaphors of Self and Communication: English and Cantonese," *Multilingua* 16 (1997): 1–38.

60. Lo Tam Fee-yin, *Cantonese Colloquial Expressions* (Hong Kong: Chinese University Press, 2007).

61. Mariann K. Wells adopted a similar approach in her M.A. thesis "Chinese Temples in California" (Univ. of California, Berkeley, 1962), p. 83.

62. John DeFrancis, *The Chinese Language: Facts and Fantasy* (Honolulu: Univ. of Hawaii Press, 1984).

63. See the contributions in *Framing and Imagining Disease in Cultural History*, ed. George S. Rousseau (New York: Palgrave Macmillan, 2003).

64. C. Rosenberg, "Disease in History: Frames and Framers," *Milbank Quarterly* 67 (1989) suppl. 1:1–15.

65. See Jon Arrizabalaga, "Problematizing Retrospective Diagnosis in the History of Disease," *Asclepio* 54 (2002): 51–70.

66. The infected medical student, Charles B. Hare, was an assistant to Frederick G. Novy at the University of Michigan in Ann Arbor, handling plague cultures brought back from Chinatown. Hare became seriously ill with pneumonic plague but eventually recovered after receiving massive doses of Yersin antiplague serum. See Novy to Wyman, Apr. 9, 1901, National Archives and Records Administration, Public Health Documents in Records Group 30, Central File 1897–1923, National Archives II, College Park, MD, and publication of the case, *Journal of the American Medical Association* (hereafter *JAMA*) 36 (Apr. 13, 1901): 1049.

67. R. D. Perry and J. D. Fetherston, "*Yersinia Pestis:* Etiologic Agent of Plague," *Clinical Microbiology Reviews* 10 (Jan. 1997): 35–66.

68. M. Achtman et al., "Microevolution and History of the Plague Bacillus Yersinia Pestis," *Proceedings of the National Academy of Sciences* 101 (2004): 17837–42.

69. M. Drancourt et al., "Genotyping, Orientalis-like *Yersinia Pestis,* and Plague Pandemics," *Emerging Infectious Diseases* 10 (Sept. 2004): 1585–92; S. Haensch et al., "Distinct Clones of Yersinia Pestis Caused the Black Death," *PLoS Pathogens* 6 (Oct. 2010): 1–15.

70. G. Morelli et al., "Yersinia Pestis Genome Sequencing Identifies Patterns of Global Phylogenetic Diversity," *Nature Genetics* 42 (Dec. 12, 2010), 1140.

71. The issue of blocked flea transmission is currently under review. R. J. Eisen et al., "Studies of Vector Competency and Efficiency of North American Fleas for *Yersinia Pestis:* State of the Field and Future Research Needs," *Journal of Medical Entomology* 46 (2009): 737–44.

72. K. L. Gage and M. Y. Kosoy, "Natural History of Plague: Perspectives from More than a Century of Research," *Annual Review of Entomology* 50 (2005): 505–28.

73. Guenter B. Risse, "Epidemics and History: Ecological Perspectives and Social Responses," in *AIDS: The Burdens of History,* ed. Elizabeth Fee and Daniel M. Fox

(Berkeley: Univ. of California Press, 1988), 33–66, and "Epidemics before AIDS: A New Research Program," in *AIDS and the Historian*, ed. Victoria Harden and Guenter B. Risse, NIH Publication 91-1584, (Washington, DC: USDHHS, 1991), 3–12.

74. R. Barrett and P. J. Brown, "Stigma in the Time of Influenza: Social and Institutional Responses to Pandemic Emergencies," *Journal of Infectious Diseases* 197 (2008): S34–37.

75. Da Zheng, "Encountering the Other: SARS, Public Health, and Race Relations," *Journal of American Popular Culture* 4 (Spring 2005): 1–9.

76. Richard E. Neustadt and Ernest R. May, *Thinking in Time: The Uses of History for Decision-Makers* (New York: Free Press, 1986), xi–xxii.

77. V. Berridge, "History Matters? History's Role in Health Policy Making," *Medical History* 52 (2008): 311–26.

78. Wendy Orent, *Plague: The Mysterious Past and Terrifying Future of the World's Most Dangerous Disease* (New York: Free Press, 2004); Peter Patton, "Quarantine: Historical Lessons Learned," Center for Policing Terrorism, Chemical, Biological, Radiological and Nuclear Working Group, Manhattan Institute, Apr. 30, 2004, 1–14.

79. Marc Siegel, *False Alarm: The Truth about the Epidemic of Fear* (Hoboken, NJ: Wiley and Sons, 2005).

CHAPTER ONE: The People of Tang in San Francisco

Note: "People of Tang" was a common appellation for the Chinese people; it refers to the Tang dynasty (618–907), one of the most glorious in Chinese history.

Epigraph. Proclamation, July 18, 1900; reprinted in the *San Francisco Chronicle*, July 19, 1900.

1. The Mandarin spelling of his name was Huang Zhi Jing. For a general introduction to Chinese-American history, see Iris Chang, *The Chinese in America: A Narrative History* (New York: Viking, 2003), 1–172. See also Thomas Sowell, "The Chinese," in *Ethnic America: A History* (New York: Basic Books, 1981), 133–42.

2. Alan M. Kraut, "A Plague of Nativism: The Cases of Chick Gin and 'Typhoid Mary,'" in *Silent Travelers: Germs, Genes, and the "Immigrant Menace"* (New York: Basic Books, 1993), 78–96; Howard Markel, "Bubonic Plague Visits San Francisco's Chinatown," in *When Germs Travel: Six Major Epidemics That Have Invaded America since 1900 and the Fears They Have Unleashed* (New York, Pantheon, 2004), 49–77.

3. Information concerning Wong's life and illness was obtained from the Chinese General Consul and the so-called Six Companies. Medical details of this case were published in *Occidental Medical Times* (hereafter *OMT*) 14 (July 1900): 203.

4. Exclusionary immigration policies and economic realities precluded the migration of families; Richard J. Smith, "Social Life," in *China's Cultural Heritage: The Qing Dynasty, 1644–1912* (Boulder, CO: Westview, 1994), 245–75. See also George A. Peffer, *If They Don't Bring Their Women Here: Chinese Female Immigration before Exclusion* (Urbana: Univ. of Illinois Press, 1999).

5. Bei Keng (literally "Northern Pit") was probably a market town and one of about twenty administrative subdivisions; its name may reflect previous quarrying activities in that area.

6. A revisionist history based on contemporary reports of conditions in Xinning and other districts of Guangdong province is Yong Chen, *Chinese San Francisco, 1850–1943: A Transpacific Community* (Stanford, CA: Stanford Univ. Press, 2000), esp. 11–23.

7. A. Y. C. King and M. H. Bond, "The Confucian Paradigm of Man: A Sociological View," in *Chinese Culture and Mental Health,* ed. W. S. Ten and D. Y. H. Wu (New York: Academic Press, 1985), 29–46.

8. An extensive bibliography deals with Chinese emigration. See *The Encyclopedia of the Chinese Overseas,* ed. Lynn Pan (Cambridge, MA: Harvard Univ. Press, 1999). For California, see Daniel and Samuel Chu, *Passage to the Golden Gate: A History of the Chinese in America to 1910* (New York: Doubleday, 1967). A more recent update is Richard B. Rice, William A. Bullough, and Richard J. Orsi, *Elusive Eden: A New History of California* (Boston: McGraw-Hill, 2002).

9. This remains a guess based on information provided by Chinese officials. Wong may have been among the nearly 42,000 Chinese that arrived in 1882 prior to enactment of the Exclusion Act. See Erika Lee, "Enforcing the Borders: Chinese Exclusion Act along the U.S. Borders with Canada and Mexico, 1882–1924," *Journal of American History* 89 (2002): 54–86.

10. Madeline Yuan-yin Hsu, "Slipping through the Golden Gate: Immigration under Chinese Exclusion," in *Dreaming of Gold, Dreaming of Home: Transnationalism and Migration between the United States and South China, 1882–1943* (Stanford, CA: Stanford Univ. Press, 2000), 57–58. See also Peter Kwong, *Forbidden Workers: Illegal Chinese Immigrants and American Labor* (New York: New Press, 1997).

11. Ronald Takaki, *Strangers from a Different Shore: A History of Asian Americans* (Boston: Little, Brown, 1988), 80–131. For more details, see Ko-Lin Chin, *Smuggled Chinese: Clandestine Immigration to the United States* (Philadelphia: Temple Univ. Press, 1999), and Erika Lee, *At America's Gates: Chinese Immigration during the Exclusion Era, 1882–1943* (Chapel Hill: Univ. of North Carolina Press, 2003).

12. Phillip J. Dreyfus, *Our Better Nature: Environment and the Making of San Francisco* (Norman: Univ. of Oklahoma Press, 2008), 32–42. See also contributions in *San Francisco Bay: The Urbanized Estuary,* ed. T. J. Conomos (San Francisco: The Division, 1979).

13. G. H. Fitch, "A Night in Chinatown," *Cosmopolitan,* February 1887, 349. Fitch was editor of San Francisco's *Daily Evening Bulletin.*

14. The Kong Chow temple faced south but the altar was oriented towards the east, said to harmonize with the local currents of cosmic breath. See Lani Ah Tye Farkas, "The Kong Chow Temple," in *Bury My Bones in America: The Saga of a Chinese Family in California, 1852–1996: From San Francisco to the Sierra Gold Mines* (Nevada City, CA: Carl Mautz, 1998), 15–19.

15. Ole Bruun, "Fengshui: A Challenge to Anthropology," in *Fengshui in China: Geomantic Divination between State Orthodoxy and Popular Religion* (Honolulu: Univ.

of Hawaii Press, 2003), 1–33. See also E. N. Anderson, *Mountains and Water: Essays on the Cultural Ecology of South Coastal China* (Taipei: Oriental Cultural Service, 1973).

16. Jack M. Potter, "Wind, Water, Bones and Souls: The Religious World of the Cantonese Peasant," *Journal of Oriental Studies* 8 (1970): 139–53.

17. Wendy L. Rouse, "What We Didn't Understand: A History of Chinese Death Ritual in China and California," in *Chinese American Death Rituals: Respecting the Ancestors,* ed. Sue Fawn Chung and Priscilla Wegans (Lanham, MD: AltaMira, 2005), 36–37. For more information, see Fred W. Mueller Jr., "Feng-Shui: Archeological Evidence for Geomancy in Overseas Chinese Settlements," in *An American Chinatown: Archeology,* ed. Wong Ho Leun (San Diego: Great Basin Foundation, 1987).

18. While pretending to be systematic and exacting, contradictions within schools of feng shui made the application of its principles adaptive and arbitrary, subject to extraneous conditions, as well as to the whims of experts. See Ronald G. Knapp, *China's Living Houses: Folk Beliefs, Symbols, and Household Ornamentation* (Honolulu: Univ. of Hawaii Press, 1999).

19. Several theaters, including the Royal Chinese Theater, opened on Jackson Street between Dupont and Kearny Streets in the second half of the nineteenth century. As early as October 1852, the Tong Hook Tong or Hook Took Tong theatrical company from China gave its first opera performance in San Francisco. See Daphne Pi-Wei Lei, "The Production and Consumption of Chinese Theater in Nineteenth-Century California," *Theater Research International* 28 (2003): 289–302, and *Operatic China: Staging Chinese Identity across the Pacific* (New York: Palgrave Macmillan, 2006).

20. In a message to President Ulysses S. Grant in 1876, the Chinese expressed their reluctance to invest in real estate because of "the general tone of public sentiment." "Documents of the Chinese Six Companies Pertaining to Immigration," in *Chinese American Voices: From the Gold Rush to the Present,* ed. Judy Yung, Gordon H. Chang, and Him Mark Lai (Berkeley: Univ. of California Press, 2006), 21.

21. For details, see Charlotte Brooks, *Aliens Neighbors, Foreign Friends: Asian Americans, Housing, and the Transformation of Urban America* (Chicago: Univ. of Chicago Press, 2009).

22. Real estate companies such as G. H. Umbsen & Co., 14 Montgomery Street, J. T. Harmes, 626 Market Street, and J. Sullivan, Parrot Building, advertised and facilitated the purchase of individual Chinatown lots with their buildings and often also managed them, collecting the rent. The preference was to offer long, three-to-twelve-year leases.

23. William Bosteny, "Married Women's Rights in Community Property under the Law of California," *Yale Law Journal* 10 (April 1901): 236–43. For women in business, see Edith Sparks, *Capital Intentions: Female Proprietors in San Francisco, 1850–1920* (Chapel Hill: Univ. of North Carolina Press, 2006).

24. In 1900, the Matthew Crooks estate owned three separate lots in Chinatown. Originally from New Orleans, Crooks, a lumber and dry goods merchant, had also purchased the entire Marin County waterfront. After his death in 1879, half of his

estate—a million dollars—went to his wife Susan, who died in 1894, leaving this real estate to her son Samuel. "Wants Its Share Now," *SF Chronicle,* May 17, 1895. (Throughout the notes, citations to San Francisco city newspapers will use the abbreviation SF.)

25. One observer wrote that the buildings had "evolved" with "pagan architecture and imagery." William Bode, *Lights and Shadows of Chinatown* (San Francisco: H. S. Crocker, 1896), 2.

26. Francesca Brea, *Technology and Gender: Fabrics of Power in Late Imperial China* (Berkeley: Univ. of California Press, 1997), 59–65.

27. For details, see Justus Doolittle, *Social Life of the Chinese: Daily Life in China* (London: Kegan Paul, 2002).

28. *SF Chronicle,* Mar 14, 1897. For more details, see Christopher L. Yip, "San Francisco's Chinatown: An Architectural and Urban History" (Ph.D. diss., University of California, Berkeley, 1985), 10–42.

29. William Hoy, "Chinatown Devises Its Own Street Names," *California Folklore Quarterly* 2 (1943): 72.

30. Yip, "San Francisco's Chinatown," 77–168.

31. For example, census data from 1900 disclosed that sixteen sewing machine operators, all from China, worked at 1027 Dupont, a few yards from the Globe Hotel. Except for three married individuals, all were males who had arrived before the 1882 Exclusion Act.

32. Thomas Magee, "China's Menace to the World," *Forum* 10 (Oct. 1890): 204.

33. Judd Kahn, *Imperial San Francisco: Politics and Planning in an American City, 1897–1906* (Lincoln: Univ. of Nebraska Press, 1979), esp. 177–209.

34. *SF Chronicle,* Mar. 20, 1898.

35. Otis Gibson, *The Chinese in America* (Cincinnati: Hitchcock and Walden, 1877), 347.

36. Charles Nordhoff, *California for Health, Pleasure, and Residence: A Book for Travelers and Settlers* (New York: Harper and Brothers, 1873), 91.

37. In April 1900, agents advertised the sale of a three-story Chinatown building worth $26,000 that would earn $300 per month rent to one single tenant, nearly a 14 percent return that compared quite favorably with real estate investments elsewhere in the city. *SF Chronicle,* Apr. 1, 1900.

38. Bode, *Lights and Shadows,* n.p.

39. *SF Chronicle,* Oct. 19, 1902.

40. *SF Call,* Sept. 5 and 8, 1896.

41. William C. Hassler, "The Methods Employed in the Eradicating of an Infectious Disease in the Chinese Quarter of San Francisco," *California State Medical Journal* (*CSJM*) 3 (Dec. 1905): 389.

42. *SF Call,* Sept. 5, 1896.

43. Peter Kwong, *Chinese America: The Untold Story of America's Oldest New Community* (New York: W. W. Norton, 2005), 75–89.

44. For a view of conditions in mid-nineteenth-century China from a Western observer, see Doolittle, *Social Life of the Chinese.*

45. S.M. Layman, "Conflict and the Web of Group Affiliations in SF's Chinatown, 1850–1910," *Pacific Historical Review* 43 (Nov. 1974): 473–99.

46. Stewart Culin, *Customs of the Chinese in America* (1887; reprint, San Francisco: R. and E. Research, 1970), 193.

47. Robert McClellan, *The Heathen Chinese: A Study of American Attitudes towards China, 1890–1905* (Columbus: Ohio State Univ. Press, 1971), 43.

48. T. M. Logan, "The Chinese and the Social Evil Question," *Biennial Report of the State Board of Health of California, 1870–1871* (Sacramento, 1871), 48.

49. R. F. G. Spier, "Food Habits of Nineteenth Century California Chinese," *California Historical Quarterly* 37 (1958): 79–84 and 129–36; Anita Mannur, "Asian American Food-Scapes," *Amerasia Journal* 32 (2006): 1–6.

50. Charles W. Dabney Jr (1855–1945) was a chemist interested in applying his science to agricultural management. His "interesting" hypothesis was mentioned in Walter Wyman, "The Black Plague," *North American Review* 164 (Apr. 1897): 448.

51. On Feb. 14, 1874, California governor James G. Blaine declared, "You cannot work a man who must have beef and bread alongside a man who can live on rice."

52. *CSYP,* June 2, 1900.

53. The Six Companies defended this diet of rice, fish, and vegetables, explaining that it was "slightly different; our tastes are not exactly alike but cannot be forced. Is this a sin of sufficient gravity to be brought before the President and Congress of the United States?" Yung, *Chinese American Voices,* 21.

54. *SF Chronicle,* Oct. 19, 1902.

55. Thomas W. Chinn, "A Historian's Reflections on Chinese-American Life in San Francisco," Regional Oral History Office, Bancroft Library, Univ. of California, Berkeley, 1993, 14. See also *SF Chronicle,* Jan. 13, 1898.

56. John Macgowan, "Home and Family Life," in *Lights and Shadows of Chinese Life* (Shanghai: N. China Daily News and Herald, 1909), 230–44.

57. S. Cullin, "Customs of the Chinese in America," *Journal of American Folklore* 3 (Apr.–June 1890): 191–200.

58. Hong Liu, "Migration and Taishan: Historical Perspectives," in Pan, *Encyclopedia of the Chinese Overseas,* 30–31.

59. Chinn, "Historian's Reflections," 8–14.

60. *SF Chronicle,* Oct. 2, 1904.

61. A Chinese document explained that a *huiguan* was "originally organized for the purpose of mutual protection and care of our people coming to and going from this country." See "Documents of the Chinese Six Companies Pertaining to Immigration," in Yung, *Chinese American Voices,* 22.

62. See Marta Hanson, "Merchants of Medicine: Hui Zhou, Mercantile Consciousness, Morality, and Medical Patronage in Seventeenth Century China," in *East Asian Science: Tradition and Beyond,* ed. Hashimoto Keizo, J. and L. Skar (Osaka: Kansai Univ. Press, 1995), 207–14.

63. L. Eve Armentrout Ma, "Chinatown Organizations and the Anti-Chinese Movement, 1882–1914," in *Entry Denied: Exclusion and the Chinese Community in*

America: 1882–1943, ed. Sucheng Chan (Philadelphia: Temple Univ. Press, 1991), 147–69.

64. James L. Watson, "The Structure of Chinese Funerary Rites: Elementary Forms, Ritual Sequence and the Primacy of Performance," in *Death Ritual in Late Imperial and Modern China,* ed. J. L Watson and E. S. Rawski (Berkeley: Univ. of California Press, 1988), 3–8.

65. The Ning Yung huiguan was established in 1852. For an overview, see Thomas W. Chinn, *Bridging the Pacific: San Francisco Chinatown and Its People* (San Francisco: Chinese Historical Society of America, 1989), 1–59.

66. The principal districts represented by the Sam Yup were Nanhai (with its tailors and butchers), Panyu and Shunde (cloth makers).

67. Him Mark Lai, "The Sanyi (Sam Yup) Community in America," in *Becoming Chinese American: A History of Communities and Institutions* (Walnut Creek, CA: AltaMira, 2004), 77–142.

68. L. Eve Armentrout Ma, "Chinatown Organizations and the Anti-Chinese Movement, 1882–1914," in Chan, *Entry Denied,* 147–69.

69. Americans usually called the huiguans "companies." For details, see Joseph Esherick and Mary Rankin, *Chinese Local Elites and Patterns of Dominance* (Berkeley: Univ. of California Press, 1990), 334–38.

70. Yong Cheng, "Collective Identity" in *Chinese San Francisco, 1850–1943: A Trans-Pacific Community* (Stanford, CA: Stanford Univ. Press, 2000), 137–41.

71. Details in William Hoy, *The Chinese Six Companies* (San Francisco: Chinese Consolidated Benevolent Association, 1942). Earlier organizations are discussed in Esherick and Rankin, *Chinese Local Elites,* 334–38.

72. Fong Kum Ngon, "The Chinese Six Companies," *Overland Monthly* 23 (May 1894): 518–26.

73. *SF Chronicle,* Mar. 5, 1905.

74. For details, see Lucy E. Salyer, *Laws Harsh as Tigers: Chinese Immigrants and the Shaping of Modern Immigration Law* (Chapel Hill: Univ. of North Carolina Press, 1995), and Charles J. McClain, *In Search of Equality: The Chinese Struggle against Discrimination in Nineteenth-Century America* (Berkeley: Univ. of California Press, 1994).

75. L. Salyer, "Captive of Law: Judicial Enforcement of the Chinese Exclusion Laws, 1891–1905," *Journal of American History* 76 (1989): 91–117.

76. See diary of Zhang Yinhuan, Chinese minister from 1886–1889, "Chinese in America," in *Land without Ghosts: Chinese Impressions of America from the Mid-Nineteenth Century to the Present,* trans. and ed. R. D. Arkush and L. O. Lee (Berkeley, Univ. of California Press, 1989), 71–73.

77. *SF Chronicle,* Mar. 27, 1897.

78. *SF Chronicle,* Apr. 15, 1897.

79. As reported by California's Labor Commissioner, a Chinese family of five in the shelled-shrimp trade collectively earned about a dollar for ten to twelve hours of work if sufficient catch was available. They rented an unfurnished room for three

dollars per month and calculated their other living expenses as not exceeding fifty cents daily; *SF Chronicle,* Feb. 18, 1906.

80. For conflicting representations of Chinese migrant workers in the United States through the use of selective literary works, see Caroline Hyo Jung Yang, "Reconstruction's Labor: The Asian Worker in Narratives of U.S. Culture and History, 1890–1930" (Ph.D. diss., Univ. of Washington, 2007).

81. *SF Call,* Aug. 28, 1896. One anti-Chinese author predicted that at this rate, the aging, tubercular, and wifeless Chinese would become extinct by 1930. Quoted in Henry Yu, *Thinking Orientals: Migration, Contact, and Exoticism in Modern America* (New York: Oxford Univ. Press, 2001), 134.

82. Kitty Calavita, "The Paradoxes of Race, Class, Identity, and 'Passing': Enforcing the Chinese Exclusion Acts, 1882–1910," *Law and Social Inquiry* 25 (2000): 1–40.

83. Myron L. Cohen, "Being Chinese: The Peripheralization of Traditional Identity," *Daedalus* 120 (Spring 1991): 113–34.

84. *SF Chronicle,* Nov. 27, 1899.

85. Immanuel C. Y. Hsu, "The Reform Movement of 1898," in *The Rise of Modern China,* 5th ed. (New York: Oxford Univ. Press, 1995), 355–84. See also Luke S. K. Kwong, *A Mosaic of the Hundred Days: Personalities, Politics, and Ideas of 1898* (Cambridge, MA: Harvard Univ. Press, 1984), and Meribeth E. Cameron, *The Reform Movement in China, 1898–1912* (New York: Octagon, 1963).

86. *SF Examiner Sunday Magazine,* Jan. 21, 1900. For information on the Empress Dowager, see Sterling Seagrave, *Dragon Lady: The Life and Legend of the Last Empress of China* (New York: Alfred A. Knopf, 1992).

87. "Night after night he harangued audiences of coolies who felt for the first time the sense of political freedom and had the delight of listening to free speech in a free country"; Morrisson Pixley, "A Chinese Newspaper in America," *World's Work* 3 (1902): 1951.

88. For information about the political situation in China, see Immanuel C. Y. Hsu, "The Ching Period in Historical Perspective," in *Rise of Modern China,* 440–51. For San Francisco, see Corinne Hoexter, *From Canton to California: The Epic of Chinese Immigration* (New York: Four Winds Press, 1976), 161–67.

89. *SF Chronicle,* Feb. 7, 1900.

90. Gibson, *Chinese in America,* 338–39.

91. Anthony W. Lee, *Picturing Chinatown: Art and Orientalism in San Francisco* (Berkeley: Univ. of California Press, 2001), 141.

92. L. Laamann, "Pain and Pleasure: Opium as Medicine in Late Imperial China," *Twentieth-Century China* 28 (Nov. 2002): 1–20. For contemporary details, see H. H. Kane, *Opium Smoking in America and China: A Study of Its Prevalence and Effects, Immediate and Remote, on the Individual and the Nation* (New York: G. P. Putnam's Sons, 1882).

93. See Diana L. Ahmad, *The Opium Debate and Chinese Exclusion Laws in the Nineteenth-Century American West* (Reno: Univ. of Nevada Press, 2007).

94. See Marlon K. Hom, *Songs of Gold Mountain: Cantonese Rhymes from San Francisco's Chinatown* (Berkeley: Univ. of California Press, 1987), 23.

95. Richard H. Dillon, *The Hatchet Men: The Story of the Tong Wars in San Francisco's Chinatown* (New York: Coward-McCann, 1962), 59–71.

96. Huping Ling, *History of Chinese American Women and Their Lives, in Surviving on the Gold Mountain* (Albany: State Univ. of New York Press, 1998).

97. Culin, "The I Hing or 'Patriotic Rising': Chinese Secret Societies," in *Customs of the Chinese in America,* 1–43.

98. One Chinatown merchant, secretary of a local huiguan, told federal officials that he was approached by tongs and told to extract a two-dollar head tax from every member of his benevolent society for protection purposes. When he refused, the tongs placed a $300 bounty on the head of eight merchant members, including his own. Afraid of being killed, the man stopped walking alone through the district and eventually followed the advice of friends to return to China. *Report of the Industrial Commission on Immigration and Education* (Washington, DC: GPO, 1901), 15:792–94.

99. For more details, see Eng Yin Gon and Bruce Grant, *Tong War!* (New York: N. L. Brown, 1930).

100. See Kevin J. Mullen, *Dangerous Strangers: Minority Newcomers and Criminal Violence in the Urban West, 1850–2000* (New York: Palgrave-Macmillan, 2005).

101. "Ready to Shed Blood, " *SF Chronicle,* May 21, 1893.

102. For a broad view of Asian crime, see Walter G. Beach, *Oriental Crime in California: A Study of Offenses Committed by Orientals in the State, 1900–1927* (Stanford, CA: Stanford Univ. Press, 1932).

103. Eve Armentrout Ma, "Urban Chinese at the Sinitic Frontier: Social Organizations in the United States Chinatowns, 1849–1898," *Modern Asian Studies* 17 (1983): 107–35.

104. *SF Chronicle,* Jan. 11, 1900.

105. *SF Chronicle,* May 21, 1893.

106. *SF Chronicle,* Jan. 30, 1900.

107. Chen, "Collective Identity," in *Chinese San Francisco,* 124–27.

108. For background, see Nayan Shah, *Contagious Divides: Epidemics and Race in San Francisco* (Berkeley: Univ. of California Press, 2002), 17–44.

109. Chinatown was subjected to numerous and contradictory representations based on political and racial agendas; K. Scott Wong, "Chinatown: Conflicting Images, Contested Terrain," *Melus* 20 (Spring 1995): 3–15.

110. *SF Examiner,* Mar. 1, 1900.

111. *SF Chronicle,* Mar. 3, 1900.

112. *SF Chronicle,* Mar. 4, 1900.

113. Hom, *Songs of Gold Mountain,* 100.

CHAPTER TWO: Guarding Life and the Way of Death

Epigraph. CSYP, July 20, 1900.

1. *SF Examiner,* Jan. 1, 1900.

2. Stephan Feuchtwang, "History, Identification, and Belief," in *Popular Religion in China: The Imperial Metaphor* (Richmond, UK: Curzon, 2001), 1–26. See also Catherine Bell, "Review Article: Religion and Chinese Culture: Towards an Assessment of Popular Religion," *History of Religion* 29 (1989): 35–57.

3. Jack Potter, "Wind, Water, Bones, and Souls: The Religious World of the Cantonese Peasant," *Journal of Oriental Studies* 8 (1970): 148–50.

4. The tendency to view gods as public officials or magistrates or members of the imperial court was an important characteristic of what can be termed "popular religion" in China. See Myron L. Cohen and Stephen F. Teiser, "Living in the Chinese Cosmos: Understanding Religion in Late Imperial China (1644–1911)," 2007, http://afe.easia.columbia.edu/cosmos/.

5. C. K. Yang, introduction to *Religion in Chinese Society* (Berkeley: University of California Press, 1961), 1–27.

6. "The Chinese Cosmos: Basic Concepts," in Cohen and Teiser, "Living in the Chinese Cosmos," adapted from Stephen F. Teiser, "The Spirits of Chinese Religion," in *Religions of China in Practice*, ed. Donald S. Lopez Jr. (Princeton, NJ: Princeton University Press, 1990).

7. Eve Armentraut Ma, "Chinese Traditional Religion in North America and Hawaii," in *Chinese America: History and Perspectives* (San Francisco: Chinese Historical Society of America, 1988), 131–47.

8. Richard J. Smith, "Popular Religion," in *China's Cultural Heritage: The Qing Dynasty, 1644–1912* (Boulder, CO: Westview, 1994), 174–85. See also Meir Shahar and Robert P. Weller, eds., *Unruly Gods: Divinity and Society in China* (Honolulu: University of Hawaii Press, 1996).

9. Feuchtwang, "History, Identification, and Belief," 1–26.

10. For reference, see Anne Birrell, *Chinese Mythology: An Introduction* (Baltimore: Johns Hopkins University Press, 1993), and E. T. C. Werner, *A Dictionary of Chinese Mythology* (New York: Julian Press, 1961).

11. Jonathan Chamberlain, *Chinese Gods* (Hong Kong: Long Island Publishers, 1983).

12. The spelling of names for Chinese gods varies significantly. Anglicized versions of the name include Kwan Dai, Wu Ti, Mo Dai, Kuan Kung, and Kwan Dai. A good source for stories about some of these deities is E. T. C. Werner, *Myths and Legends of China* (London: Harrap, 1922).

13. Frederick E. Shearer, ed. *The Pacific Tourist* (New York: Adams and Bishop, 1879), 287.

14. "Guan Sheng Di World-Sub-Doing, Eternally-Effective, Disaster-Relieving Prayer," trans. Andrew Gudgel, www.andrewgudgel.com/guandi.htm (accessed Aug. 2, 2011).

15. Richard von Glahn, "Plague Demons and Epidemic Gods," in *The Sinister Way: The Divine and the Demonic in Chinese Religious Culture* (Berkeley: University of California Press, 2004), 98–129.

16. Caroline C. Leighton, *Life in Puget Sound with Sketches of Travel in Washington Territory, Oregon, and California, 1865–1881* (Boston: Lee and Shepard, 1884), 25.

17. Hubert H. Bancroft, *Essays and Miscellany* (San Francisco: History Company, 1890), 385.

18. Lee Irwin, "Divinity and Salvation: The Great Goddesses of China," *Asian Folklore Studies* 49 (1990): 59–62. For more details, see Martin Palmer and Jay Ramsay, *Kuan Yin: Myths and Revelations of the Chinese Goddess of Compassion* (London: Thorsons, 1995).

19. P. Unshuld, "Concepts of Illness in Ancient China: The Case of Demonological Medicine," *Journal of Medicine and Philosophy* 5 (1980): 112–32. For details, see Von Glahn, *Sinister Way.*

20. For details about healing rituals based on Daoist and Buddhist beliefs, see Michel Strickman, *Chinese Magical Medicine* (Stanford, CA: Stanford University Press), 2002.

21. *SF Chronicle,* Aug. 7, 1904.

22. Bancroft, *Essays and Miscellany,* 401–12.

23. The word *joss* is a corruption of the Portuguese *dios* (god).

24. *SF Call,* Dec. 23, 1900.

25. Frederic J. Masters, "Pagan Temples in San Francisco," *Californian* 2 (Nov. 1892): 227–41.

26. Lani Ah Tye Farkas, "The Kong Chow Temple" in *Bury My Bones in America: The Saga of a Chinese Family in California, 1852–1996: From San Francisco to the Sierra Gold Mines* (Nevada City, CA: Carl Mautz, 1998), 15–19. For details, see William Hoy, *Kong Chow Temple* (San Francisco: California Pioneer Historical Society), 1939.

27. See Feuchtwang, "History, Identification, and Belief," 1–26.

28. *SF Chronicle,* Aug. 7, 1904.

29. Smith, *China's Cultural Heritage,* 174–6.

30. *SF Chronicle,* Sept. 17, 1891.

31. John A. Brim, "Village Alliance Temples in Hong Kong," in *Religion and Ritual in Chinese Society,* ed. A. P. Wolf (Stanford, CA: Stanford University Press, 1974), 93–103.

32. Fei Xiaotong, a Chinese anthropologist and sociologist, contrasted his beliefs with those prevalent in America, which he characterized as the "land without ghosts." See "A World without Ghosts," in *Land without Ghosts: Chinese Impressions of America from the Mid-Nineteenth Century to the Present,* trans. and ed. R. David Arkush and Leo O. Lee (Berkeley: University of California Press, 1989), 175–81.

33. *SF Call,* Oct. 7, 1899.

34. See Richard J. Smith, *Chinese Almanacs* (New York: Oxford University Press, 1992). An English translation of a modern Cantonese almanac is Martin Palmer, *T'ung Shu, the Ancient Chinese Almanac* (New York: Random House, 1986).

35. Harriet Quimby, "The Fortune Tellers of Chinatown," *SF Chronicle,* Aug. 3, 1902. More background available in Richard J. Smith, *Fortune-Tellers and Philosophers: Divination in Traditional Chinese Society* (Boulder: Westview, 1991).

36. Ruth Rogaski, *Hygienic Modernity: Meanings of Health and Disease in Treaty-Port China* (Berkeley: University of California Press, 2004), 22–47.

37. Ute Engelherdt, "Longevity Technique and Chinese Medicine," in *Daoism Handbook*, ed. Livia Kohn (Leiden: Brill, 2000), 109–33.

38. Manfred Porkert, *The Theoretical Foundations of Chinese Medicine: Systems of Correspondence* (Cambridge, MA: MIT Press, 1974).

39. See articles in *Daoist Body Cultivation: Traditional Models and Contemporary Practices,* ed. Livia Kohn (Magdalena, NM: Three Pines Press, 2006).

40. Marta Hanson, "Robust Northerners and Delicate Southerners: The Nineteenth-Century Invention of a Southern Medical Tradition," *Positions: East Asia Culture Critique* 6 (1998): 515–50.

41. Francesca Bray, "Chinese Health Beliefs," in *Religion, Health, and Suffering: A Crosscultural Study of Attitudes to Suffering and the Implications for Medicine in a Multireligious Society,* ed. J. R. Hinnels and R. Porter (London: Kegan Paul, 1998), 187–211.

42. "Judging from the number of their apothecary stores, one would suppose that the Chinese were large consumers of medicines," observed A. W. Loomis in "Medical Art in the Chinese Quarter," *Overland Monthly* 2 (June 1869): 496.

43. Helen Lukens Jones, "The Pacific Coast Trade in Chinese Medicines," *SF Chronicle,* Mar. 29, 1903.

44. Helen Grey, "Mysteries of Chinese," *SF Call,* Apr. 23, 1899.

45. Such medical pluralism can be found in the work of Arthur Kleinman, *Patients and Healers in the Context of Culture: An Exploration of the Borderland between Anthropology, Medicine, and Psychiatry* (Berkeley: University of California Press, 1980).

46. Chinese practitioners without a valid California medical certificate could be hauled into court if a person provided a sworn complaint. The witness could collect half of the fine that the practitioner had to pay—usually between $100 and $500; *SF Chronicle,* Dec. 6, 1901.

47. Advertisement, *CSYP,* May 12, 1900.

48. Advertisement, *CSYP,* Feb. 9, 1901.

49. Among the various translations of the *Huangdi neijing suwen,* see the more clinically oriented *The Yellow Emperor's Classic of Medicine,* trans. Maoshing Ni (Boston: Shambala, 1995). Others include Ilza Veith, *The Yellow Emperor's Classic of Internal Medicine* (Berkeley: University of California Press, 1966), and Paul Unschuld, *Nan-Ching, Classic of Difficult Issues* (Berkeley: University of California Press, 1986).

50. For a useful overview, see Francesca Bray, "Chinese Medicine," in *Companion Encyclopedia of the History of Medicine,* ed. W. F. Bynum and R. Porter, 2 vols. (London: Routledge, 1993), 1:728–54.

51. See Paul Unschuld, *Medicine in China: A History of Ideas* (Berkeley: University of California Press, 1985), 74–80.

52. Nathan Sivin, "Text and Experience in Classical Chinese Medicine," in *Knowledge and the Scholarly Medical Traditions,* ed. Don Bates (Cambridge: Cambridge University Press, 1995), 177–204. The author has also edited a key secondary source, Joseph Needham and Lu Gwei-Djen, *Science and Civilization in China,* vol. 6, *Biology and Biological Technology,* part 6,*Medicine* (Cambridge: Cambridge University Press, 2000).

53. For details, see Jian Min Wen and Garry Seifert, *Warm Disease Theory: Wen Bing Xue* (Brookline, MA: Paradigm, 2000), and Judith Farquhar, *Knowing Practice: The Clinical Encounter of Chinese Medicine* (Boulder, CO: Westview, 1994).

54. Ruth Benedict, "Bubonic Plague in Nineteenth-Century China," *Modern China* 14 (Apr. 1988): 137–38.

55. A popular summary is Ted J. Kaptchuk, *The Web That Has No Weaver: Understanding Chinese Medicine* (New York: McGraw-Hill, 2000).

56. Kaptchuk, "The Four Examinations: Signs and Symptoms," in ibid., 171–213. For more details, see Judith Farquhar, *Knowing Practice: The Clinical Encounter of Chinese Medicine* (Boulder, CO: Westview, 1994).

57. Shigehisa Kuriyama, "Visual Knowledge in Classical Chinese Medicine," in *Knowledge and the Scholarly Medical Traditions,* 205–34. See also by this author *The Expressiveness of the Body and the Divergence of Greek and Chinese Medicine* (New York: Zone, 1999).

58. For more background, see Elisabeth Hsu, *The Telling Touch* (Cambridge: Cambridge University Press, 2010).

59. The information is based on Liu Guan-jun, *Pulse Examination* (Shanghai: Science and Technology, 1979), quoted in Kaptchuk, *Web That Has No Weaver,* 194–210 and appendix C, "Pulses Revisited," 323–49.

60. For a description of popular remedies, see S. Cullin, "Chinese Drug Stores in America," *American Journal of Pharmacy,* Dec. 1887, 593–98.

61. For details, see Albert Y. Leung, *Chinese Herbal Remedies* (New York: Universe, 1984), and Paul Unschuld, *Medicine in China: A History of Pharmaceutics* (Berkeley: University of California Press, 1986).

62. See advertisement in *SF Chronicle,* Apr. 13, 1899. A secondary source is Haiming Liu, "Herbalists in the United States," in *Chinese American Transnationalism: The Flow of People, Resources, and Ideas between China and America during the Exclusion Era,* ed. Suchen Cheng (Philadelphia: Temple University Press, 2006), 136–55.

63. A. Ki Che Leung, "Diseases of the Premodern Period in China," in *The Cambridge World History of Human Disease,* ed. Kenneth F. Kiple (Cambridge: Cambridge University Press, 1993), 356.

64. One plague victim, Wong Tze Hop, who died in June 1903, still displayed traces of the salve. Poultices were credited with helping extract bullets from gunshot wounds; *SF Call,* Jan. 2, 1902.

65. Wolfram Eberhard, conclusion to *Cult and Sin in Traditional China* (Berkeley: University of California Press, 1967), 117–25.

66. James L. Watson, "Of Flesh and Bones: The Management of Death Pollution in Cantonese Society," in *Death and Regeneration of Life,* ed. Maurice Bloch and Jonathan Parry (Cambridge: Cambridge University Press, 1982), 155–86.

67. "Nearly every week the police discover some wretched unfortunate that has been left to die in an underground den by unnatural relatives or friends"; G. H. Fitch, "A Night in Chinatown," *Cosmopolitan* 2 (Feb. 1887): 356–57.

68. *CSYP,* Mar. 8, 1900. This small establishment lacked embalming facilities but apparently enjoyed a good reputation; *SF Chronicle,* Aug. 13, 1903.

69. *SF Call,* Feb. 20, 1900.

70. *SF Call,* Feb. 2, 1900.

71. *Daily Alta California,* Aug. 17, 1854.

72. *The Chinese Hospital of San Francisco* (Oakland: Carrruth and Carruth, 1899), 1.

73. A visitor to San Francisco in the late 1860s described such a "Chinese hospital." See W. Fraser Rae, "The Tigers and Chinese in San Francisco," in *Westward by Rail: The New Route to the East* (New York: D. Appleton, 1871), 296–97.

74. Michelle Renshaw, *Accommodating the Chinese: The American Hospital in China, 1880–1920* (New York: Routledge, 2005), 26–28, 33–35, and 195–207.

75. Speer was forced to leave San Francisco in 1856 for health reasons. *The Oriental,* Mar. 29, 1855, as quoted in Michael L. Stahler, "William Speer: Champion of California's Chinese, 1852–1857," *Journal of Presbyterian History* 48 (Summer 1970): 119–20.

76. Elizabeth Sinn, *Power and Charity: The Early History of the Tung Wah Hospital, Hong Kong* (Hong Kong: Oxford University Press, 1989), 1–6, 101–13.

77. According the official municipal statistics, only 68 of nearly 4,000 patients admitted to the City and County Hospital in 1875 were Chinese. Otis Gibson, *The Chinese in America* (Cincinnati, Hitchcock and Walden, 1877), 364.

78. Many poor Chinese distrusted all "foreign devils." *SF Chronicle,* Feb. 19, 1899. See also Eva J. Price, *China Journal, 1889–1900: An American Missionary Family during the Boxer Rebellion* (New York: Scribner, 1989), 222.

79. Steward Culin, *Customs of the Chinese in America* (1887; reprint, San Francisco: R. and E. Research Association, 1970), 198.

80. *SF Examiner,* Feb. 24, 1880.

81. *SF Call,* Mar. 19, 1896.

82. *SF Call,* May 8, 1888.

83. For background, see Nayan Shah, *Contagious Divides: Epidemics and Race in San Francisco* (Berkeley: University of California Press, 2002), 17–44.

84. *SF Call* and *SF Examiner,* May 14, 1888.

85. *SF Call,* Mar. 7, 1896. According to witnesses, decomposing bodies frequently lay there for days; *SF Call,* July 8, 1896. See also Shah, *Contagious Divides,* 45–76.

86. *SF Call,* Mar. 19, 1896.

87. *SF Chronicle,* Feb. 19, 1899.

88. *SF Chronicle,* Apr. 7, 1896.

89. T. K. Young, "A Conflict of Professions: The Medical Missionary in China, 1835–1890," *BHM* 47 (May–June 1973): 250–72. For medical missionary life, consult William Lockhart, *The Medical Missionary in China: A Narrative of Twenty Years Experience* (London: Hurst and Blacket, 1861).

90. Fryer (1861–1921) spent summers in China as an official translator at the Shanghai Hospital. Adrian A. Bennett, *John Fryer: The Introduction of Western Science*

and Technology into Nineteenth-century China (Cambridge, MA: Harvard University Press, 1967).

91. Atterbury advocated a policy of free medical care as a potent tool for Christianizing the Chinese. See B. C. Atterbury, "Medical Missionary Work in Peking," *China Medical Missionary Journal* 3 (1887): 113–15, and "Gratuitous Treatment," ibid. 8 (1894): 120–23.

92. *SF Chronicle,* Feb. 10, 1899. A similar reason was given for the creation of a Chinese hospital in Honolulu in 1897. See James C. Mohr, *Plague and Fire: Battling Black Death and the Burning of Honolulu's Chinatown* (New York: Oxford University Press, 2005), 33.

93. *SF Chronicle,* Feb. 19, 1899.

94. The hospital's seven-member board of directors included Fryer, Atterbury, and J. J. Valentine, president of the Wells Fargo Company, among others; *SF Chronicle,* Feb. 8, 1899.

95. *SF Chronicle,* Feb. 24, 1899.

96. There is no evidence for the institution's functioning. Chinese mortuary records list five deaths occurring in a "Chinese Hospital" between July 11 and Nov. 26, 1899, but its location is not mentioned. Chinese Mortuary Records for the City and County of San Francisco, National Archives, Pacific Region, San Bruno, CA.

97. The only brief account, based on primary Chinese sources, is Him Mark Lai, "The Chinese Hospital," in *Becoming Chinese American: A History of Communities and Institutions* (Walnut Creek, CA: AltaMira, 2004), 118–20.

98. Other displays of paternalism are presented in K. Scott Wong, "Chinatown: Conflicting Images, Contested Terrain," *Melus* 20 (Spring 1995): 9–10.

99. The list contained fifty-four donors, beginning with the Chinese minister in Washington. "Announcement" *CSYP,* May 1, 1900.

100. *CSYP,* July 3, 1900.

101. Kim Man Chan, "Mandarins in America: The Early Chinese Ministers to the United States, 1878–1907" (Ph.D. diss., University of Hawaii, 1981), 369–423.

102. For details, see Linda Pomerantz-Zhang, *Wu Tingfan (1842–1922): Reform and Modernization in Modern Chinese History* (Hong Kong: Hong Kong University Press, 1992).

103. The Alice Memorial Hospital, named after Ho Kai's British wife, Alice Walkden, opened in 1887. For details, see E. H. Paterson, *A Hospital for Hong Kong* (Hong Kong: Alice Ho Miu Ling Nethersole Hospital, 1987), 13–49. See also Gerald H. Choa, *The Life and Times of Sir Kai Ho Kai,* 2nd ed. (Hong Kong: Chinese University Press, 2000).

104. *SF Chronicle,* Feb. 19, 1899. For more information on the dispensary, see Guenter B. Risse, "Translating Western Modernity: The First Chinese Hospital in America," *BHM* 85 (Fall 2011): 413–47.

105. *SF Call,* Mar. 3, 1900.

106. Information about dispensary physicians was cobbled together from San Francisco city directories, the *Official Register and Directory of Physicians and*

Surgeons in the State of California, Polk's Medical Register and Directory of the United States and Canada, and the Federal Census.

107. Based on administrative models from their homeland, the Chinese called him a "royal physician"; *CSYP,* May 12, 1900.

108. Sturge (1856–1934) had returned from China for health reasons and was assigned by the Church to assist local Chinese. In time, however, he started helping newly arriving Japanese and increasingly cared for their physical, social, and religious needs.

109. Pond was well acquainted with San Francisco mayor James Phelan and worked at the Medical College's dispensary, where he treated non-Chinese indigents.

110. Marlon K. Hom, *Songs of Gold Mountain: Cantonese Rhymes from San Francisco's Chinatown* (Berkeley: University of California Press, 1987), 22.

111. Associations between practitioners and drug stores had a long history, going back to the Song dynasty (960–1279). See P. Unschuld, "The Relationship between Physicians and Pharmacists in China since the Song Dynasty," in *Current Perspectives in the History of Science in East Asia,* ed. Yung Sik Kim and Francesca Bray (Seoul: Seoul University Press, 1999), 429–37.

112. Ironically, an editorial in the *SF Chronicle* that day was titled "Outbreak in Chinatown," referring to the current war between the Chinese tongs. *SF Chronicle,* Mar. 6, 1900.

113. Jack M. Potter, "Wind, Water, Bones, and Souls: The Religious World of the Cantonese Peasant," *Journal of Oriental Studies* 8 (1970): 139–53.

114. Arthur P. Wolf, "Gods, Ghosts, and Ancestors," in *Religion and Ritual in Chinese Society,* ed. A. P. Wolf (Stanford, CA: Stanford University Press, 1974), 131–82.

115. Bray, "Chinese Health Beliefs," 203.

116. J. P. Lesley, " The Idea of Life after Death," *Forum* 10 (Oct. 1890): 214. See also Arthur H. Smith, *Chinese Characteristics* (New York: Revell, 1900), 15.

117. Watson, "Of Flesh and Bones," 180.

118. Emily Martin Ahern, *Chinese Ritual and Politics* (Cambridge: Cambridge University Press, 1981), 4–11.

119. Some authors stressed the emphasis on performance of proper Chinese religious rites (orthopraxy) over beliefs (orthodoxy) in the late Qing empire, but this distinction is questionable. See James L. Watson, "The Structure of Chinese Funerary Rites: Elementary Forms, Ritual Sequence, and the Primacy of Performance," in *Death Ritual in Late Imperial and Modern China,* ed. J. L. Watson and E. S. Rawski (Berkeley: University of California Press, 1988), 3. For background, see Constance A. Cook, *Death in Ancient China: The Tale of One Man's Journey* (Leiden: Brill, 2006).

120. Li Jianmin, "Contagion and Its Consequences: The Problem of Death Pollution in Ancient China," Academia Sinica, Taiwan, http://saturn.ihp.sinica.edu.tw/~bencao/0308.htm (accessed Aug. 2, 2011).

121. For an overview, see Laura J. Pasacreta, "White Tigers and Azure Dragons: Overseas Chinese Burial Practices in the Canadian and American West (1850s to 1910s)" (M.A. diss., Simon Fraser University, 1998).

122. Males coming in close contact with the body wore coarse, netlike gowns especially made for the occasion from grass fibers. The garment's small holes and angles offered protection from evil spirits flocking around the corpse who were believed to travel at right angles. *SF Call*, Dec. 23, 1900.

123. James L. Watson, "Funeral Specialists in Cantonese Society: Pollution, Performance, and Social Hierarchy," in Watson and Rawski, *Death Ritual*, 109–34.

124. Stephan Feuchtwang, *An Anthropological Analysis of Chinese Geomancy* (Vientiane: Vilhague, 1974), 222–23.

125. Quoted in Rubie S. Watson, "Graves and Politics in Southeastern China," in Watson and Rawski, *Death Ritual*, 124.

126. Watson, "Of Flesh and Bones," 155–86.

127. Ibid., 184.

128. Myron Cohen, "Souls and Salvation: Conflicting Theories in Chinese Popular Religion," in Watson and Rawski, *Death Ritual*, 180–202.

129. H. Gates, "Money for the Gods," *Modern China* 13 (July 1987): 259–77. See also Janet Lee Scott, *For Gods, Ghosts and Ancestors: The Chinese Tradition of Paper Offerings* (Seattle: University of Washington Press, 2007).

130. Details in Anne S. Goodrich, *Peking Paper Gods: A Look at Home Worship* (Nettetal: Steyler, 1991).

131. Evelyn S. Rawski, "A Historian's Approach to Chinese Death Ritual," in Watson and Rawski, *Death Ritual*, 20–34.

132. Jack M. Potter, "Wind, Water, Bones, and Souls: The Religious World of the Cantonese Peasant," *Journal of Oriental Studies* 8 (1970): 144. For more information, see Emily Martin Ahern, *The Cult of the Dead in a Chinese Village* (Stanford, CA: Stanford University Press, 1973).

133. These plates were returned to China for distribution to relatives. See "The Second Exhumation and Return of the Remains of Our Departed Friends to the Homeland (1876)," in *Chinese-American Voices: From the Gold Rush to the Present*, ed. J. Yung, G. H. Chang, and H. M. Lai (Berkeley: University of California Press, 2006), 26–29.

134. This shift had already started in the 1870s. See Otis Gibson, *Chinese in America*, 339.

135. Linda Sun Crowder, "The Chinese Mortuary Tradition in San Francisco Chinatown," in *Chinese American Death Rituals: Respecting the Ancestors*, ed. Sue F. Chung and Priscilla Wegans (Lanham, MD: AltaMira, 2005), 199–200.

136. The 1880 Memorial on Chinatown from the Anti-Chinese Council recorded the discovery of such a storage place containing more than 2,000 bones placed in satchels.

137. Among the most prominent establishments in San Francisco were Main Fook On at 732 Pacific Street, Man Fook On at 734 Pacific, Quong Fook Sang at 716 Pacific, and later Wing Hai's "Chinatown morgue," conveniently located near the Oriental Dispensary at Sacramento Street.

138. See "Second Exhumation," 26–29.

139. In November 1900, the authorities discovered a secret graveyard at Point San Pedro in San Francisco Bay near a Chinese shrimp camp. These deaths were never reported. The skeletons were believed to be either victims of the Chinatown tong wars or an earlier smallpox epidemic. *SF Chronicle,* Nov. 13, 1900.

140. *SF Chronicle,* Aug. 1, 1897.

141. *SF Call,* Apr. 29, 1900, and *SF Chronicle,* July 2, 1902.

142. Dobie, *Chinatown,* 68.

143. *SF Chronicle,* Aug. 3, 1913. By the 1910s, this exhumation and shipment of bones to China was gradually ending. A younger generation of Chinese Americans no longer believed that the spirits of the departed needed to have their bones buried in the old country to avoid persecution from evil spirits.

144. The reburial of human bones into collective graves in China can be traced back to Neolithic times. Similar ceremonies still occur today. See Cecilia Lai Wan and Amy Yin Man, *Death, Dying, and Bereavement: A Hong Kong Chinese Experience* (Hong Kong: Hong Kong University Press, 2006). See also Chee Kion Tong, *Chinese Death Rituals in Singapore* (London: Routledge Curzon, 2004).

CHAPTER THREE: Sanitation, Microbes, and Plague

1. *SF Chronicle,* July 29, 1890.

2. Chinese Mortuary Records for the City and County of San Francisco, vols. 3–4 (1885–1907), National Archives, Pacific Region, San Bruno, CA. For background on this documentation, see C. Prechtel-Kluskens, comp., *Mortuary Records of Chinese Decedents in California, July 1870–April 1933, Compiled by the San Francisco, California, Immigrations Office* (Washington, DC: National Archives and Records Administration, 2009).

3. *SF Call,* Feb. 2, 1900.

4. G. B. Risse, "Cause of Death as a Historical Problem," *Continuity and Change* 12 (1997): 175–88.

5. A complete statistical study performed on the mortuary records with the assistance of epidemiologist Jeffrey D. Stanaway will be published elsewhere. See www.gbrisse.com/articles.html.

6. A near contemporary source is John Dudgeon, *The Diseases of China: Their Causes, Conditions, and Prevalence Contrasted with those of Europe* (Glasgow: Dunn and Wright, 1877).

7. Susceptibility to the disease was related to the whiteness of skin. See Linda L. Nash, *Inescapable Ecologies: A History of Environment, Disease and Knowledge* (Berkeley, Univ. of California Press, 2006).

8. *CSYP,* Oct. 2, 1902.

9. Mark J. White reported eighteen cases based on autopsies performed on Chinese plague victims. The examinations disclosed the presence of encysted larval flukes in the victims' livers. See Zhao-Rong Lun et al., "Clonorchiasis: A Key Foodborne Zoonosis in China," *The Lancet: Infectious Diseases* 5 (January 2005): 31–41.

10. E. C. Faust, "Parasitic Infections and Human Disease in China," *Archives of Pathology and Laboratory Medicine* 2 (1926): 223–40. See also Michael Keevak, *Becoming Yellow: A Short History of Racial Thinking* (Princeton, NJ: Princeton Univ. Press, 20110, 52–54.

11. Jefferys, *Diseases of China,* 621–40. A classic Chinese treatise on eye diseases is *Simiao Sun, Essential Subleties on the Silver Sea: The Yin-hai jing-wei, A Chinese Classic on Ophthalmology,* trans. J. Kovacs and P. U. Unschuld (Berkeley: Univ. of California Press, 1998).

12. Jeffreys, *Diseases of China,* 407–50.

13. For details, see Angela K. C. Leung, *Leprosy in China: A History* (New York: Columbia Univ. Press, 2009), esp. 19–51.

14. In the early 1900s, the diagnostic problems centered on two factors: the lepra bacillus resembled the tubercle organism in shape and staining, and it could not be cultivated outside the human body, hindering animal inoculations.

15. *SF Municipal Reports, Fiscal Year 1908–1909* (San Francisco, 1909), 791.

16. *SF Examiner,* Feb. 24, 1880. For political background, see Neil L. Shumsky, *The Evolution of Political Protest and the Workingmen's Party in California* (Columbus: Ohio State Univ. Press, 1991).

17. John P. Young, *San Francisco: A History of the Pacific Coast Metropolis,* 2 vols. (Chicago: Clarke, 1912), 2:780.

18. See Tony Gould, *A Disease Apart: Leprosy in the Modern World* (New York: St. Martin's Press, 2005), and Gavan Daws, *Holy Man: Father Damian of Molokai* (New York: Harper and Row, 1973).

19. For details, see Chia Feng Chang, "Aspects of Smallpox and Its Significance in Chinese History" (Ph.D. diss., Univ. of London, 1996).

20. A. Ki Che Leung, "Diseases of the Premodern Period in China," in *The Cambridge World History of Human Disease,* ed. Kenneth F. Kiple (Cambridge, Cambridge Univ. Pres, 1993), 354–62.

21. E. T. C. Werner, *Myths and Legends of China* (London: G. G. Harrap, 1922), 240–50.

22. For background, see S. F. Cook, "Smallpox in Mexican and Spanish California, 1770–1845," *BHM* 7 (Feb. 1939): 153–91.

23. David Powell, "Should Vaccination Be Made Compulsory?" *OMT* 13 (Jan. 1899): 5–14.

24. Discussion at the California Academy of Medicine, May 24, 1900, *OMT* 14 (July 1900): 221.

25. For decades, all Chinese referrals to the City Hospital were shunted to the pesthouse located on 26th Street. See Joshua Shu Yand, "A Model to Increase Access to Care for Immigrants: Charting Developments of San Francisco Chinatown's Ethnic-Specific Health Care System" (Ph.D. thesis, University of California, Los Angeles, 2005), 115–16.

26. Chinese Immigration, 45 U.S. Cong. (1877), H.R. Miscellaneous Documents, 1:14.

27. Liang Qichao, "The Power and Threat of America," in *Land without Ghosts: Chinese Impressions of America from the Mid-Nineteenth Century to the Present,* trans. and ed. R. David Arkush and Leo O. Lee (Berkeley: Univ. of California Press, 1989), 94.

28. *SF Chronicle,* June 6, 1900.

29. Susan Craddock, "Tuberculosis, Tenements, and the Epistemology of Neglect," in *City of Plagues: Disease, Poverty, and Deviance in San Francisco* (Minneapolis: Univ. of Minnesota Press, 2000), 21–60. See also Bridie Andrews, "Tuberculosis and the Assimilation of Germ Theory in China, 1895–1937," *Journal of the History of Medicine and Allied Sciences* 52 (1997): 114–57.

30. Maureen Ogle, *All the Modern Conveniences: American Household Plumbing, 1840–1890* (Baltimore: Johns Hopkins Univ. Press, 1996), 8–35.

31. W. A. Cohen, "Locating Filth," in *Filth: Dirt, Disgust, and Modern Life,* ed. William A. Cohen and Ryan Johnson (Minneapolis, Univ. of Minnesota Press, 2005), vii–xxxvii.

32. Chadwick's testimony to the Metropolitan Sewage Manure Co-Committee in 1846 is quoted in S. E. Finer, *The Life and Times of Sir Edwin Chadwick* (London, 1952), 298.

33. Suellen M. Hoy, *Chasing Dirt: The American Pursuit of Cleanliness* (New York: Oxford Univ. Press, 1995), 60–70.

34. R. Palmer, "In Bad Odour: Smell and Its Significance in Medicine from Antiquity to the Seventeenth Century," in *Medicine and the Five Senses,* ed. W.F. Bynum and R. Porter (Cambridge: Cambridge Univ. Press, 1993), 61–68.

35. M. McPhee, "Deodorized Culture," *Arizona Anthropologist* 8 (1992): 25–45.

36. M. McPhee "The American Way," *Arizona Anthropologist* 8 (1992): 87–92.

37. For details, see M. H. Smith, *How Race Is Made* (Chapel Hill: Univ. of North Carolina Press, 2006).

38. Workingmen's Party of California, Anti-Chinese Council, *Chinatown Declared a Nuisance!* (San Francisco: Workingmen's Party of California, 1880), 4.

39. Georges Vigarello, *Concepts of Cleanliness: Changing Attitudes in France since the Middle Ages,* trans. J. Birrell (Cambridge: Cambridge Univ. Press, 1988), 142–55.

40. Ibid.

41. Christopher Hamlin, "Good and Intimate Filth," in Cohen and Johnson, *Filth,* 5–6.

42. Ruth Rogaski, *Hygienic Modernity: Meanings of Health and Disease in Treaty-Port China* (Berkeley: Univ. of California Press, 2004), 22–47, 104–35.

43. John Macgowan, *Lights and Shadows of Chinese Life* (Shanghai: North China Daily News and Herald, 1909), 105.

44. Edward S. Morse, "Latrines of the East," *American Architect* 39 (Mar. 18, 1893), 171.

45. Jefferys and Maxwell, *Diseases of China,* 586.

46. Macgowan, "Home and Family Life," in *Lights and Shadows,* 230–44.

47. Rogaski, *Hygienic Modernity,* 55.

48. For an analysis of human waste as a source of pathology in the Philippines, see W. Anderson, "Excremental Colonialism: Public Health and the Poetics of Pollution," *Critical Inquiry* 21 (Spring 1995): 640–69.

49. Lord Curzon remarked that China's capital possessed "myriad and assorted effluvia without parallel in the modern world"; G.N. Curzon, *Problems of the Far East* (London: Longman, Green, 1894), 245–46.

50. Carlo Cipolla, "The Origins and Development of the Health Boards," in *Public Health and the Medical Profession in the Renaissance* (Cambridge: Cambridge Univ. Press, 1976), 11–66.

51. For an overview, see W. D. Foster, *A History of Medical Bacteriology and Immunology* (London: Heinemann, 1970).

52. The "zymotic" theory of disease was formulated by the German chemist Justus von Liebig (1803–73). See William Brock, *Justus von Liebig: The Chemical Gatekeeper* (Cambridge: Cambridge Univ. Press, 1997).

53. J. K. Crellin, "The Dawn of the Germ Theory: Particles, Infection, and Biology," in *Medicine and Science in the 1860s,* ed. F. N. L. Poynter (London: Wellcome Institute, 1968), 57–76.

54. M. Pelling, "Contagion / Germ Theory / Specificity," in *Companion Encyclopedia of the History of Medicine,* ed. W. Bynum and R. Porter, 2 vols. (London: Routledge, 1993), 1:309–34.

55. J. H. Cassedy, "The Flamboyant Colonel Waring: An Anticontagionist Holds the American Stage in the Age of Pasteur and Koch," *BHM* 36 (1962): 163–76. See George E. Waring Jr., *The Sanitary Condition of City and Country Dwelling Houses* (New York: Van Nostrand, 1898).

56. Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Cambridge, MA: Harvard Univ. Press, 1998), 91–112.

57. C. V. Chapin, "The End of the Filth Theory of Disease," *Popular Science Monthly* 60 (Jan 1902): 236. For details, James H. Cassedy, *Charles V. Chapin and the Public Health Movement*, Cambridge, MA: Harvard Univ. Press, 1962.

58. See Alan R. Petersen and Deborah Lipton, *The New Public Health: Health and Self in the Age of Risk* (London: Sage, 1996).

59. A. McClary, "Germs Are Everywhere: The Germ Threat as Seen in Magazine Articles, 1890–1920," *Journal of American Culture* 3 (1980): 33–46.

60. *SF Chronicle,* Sept. 19, 1895.

61. *SF Bulletin,* Jan. 23, 1897; *CSYP,* Nov. 22, 1900.

62. M. Humphreys, "No Safe Place: Disease and Panic in American History," *American Literary History* 14 (202): 845–57.

63. *SF Bulletin,* Sept. 3, 1882.

64. Dan Sperber, *Rethinking Symbolism,* trans. A. L. Morton (Cambridge: Cambridge Univ. Press, 1975), 115–21. For more details, see Annick Le Guérer, *Scent: The Mysterious and Essential Powers of Smell,* trans. R. Miller (New York: Kodansha, 1994).

65. See Nayan Shah, *Contagious Divides: Epidemics and Race in San Francisco's Chinatown* (Berkeley: Univ. of California Press, 2001), esp. 17–76.

66. One author considered such public health issues to be fictitious, merely arguments to define the Chinese as an inferior race. See Haiming Liu, "The Resilience of Ethnic Culture," *Journal of Asian American Studies* 1, no. 2 (1998): 175.

67. Ho Yow, *Western Benefits through China's Development* (San Francisco: Mysell-Rollins, 1900), 2.

68. See Martha C. Nussbaum, "The Politics of Disgust: Practice, Theory, and History," in *From Disgust to Humanity: Sexual Orientation and Constitutional Law* (New York: Oxford Univ. Press), 1–30.

69. Describing a Chinese character in a story, author Bret Harte wrote about "that singular medicated odor—half opium, half ginger—which we recognize as the common Chinese smell"; "Story of See Yup," in *Stories in Light and Shadow* (New York: F. F. Collier and Sons, 1888), 94.

70. Otis Gibson, *The Chinese in America* (Cincinnati: Hitchcock and Walden, 1877), 63–64.

71. For an analysis of similar concerns in contemporary Los Angeles, see Natalia Molina, "Interlopers in the Land of Sunshine: Chinese Disease Carriers, Launderers, and Vegetable Peddlers," in *Fit to Be Citizens? Public Health and Race in Los Angeles, 1879–1939 (*Berkeley: Univ. of California Press, 2006), 15–45.

72. Suellen M. Hoy, "The Domestic Woman, Agent of Cleanliness," in *Chasing Dirt: the American Pursuit of Cleanliness* (New York: Oxford Univ. Press, 1995), 15–19.

73. J. M. Williamson, "An Address," *OMT* 15 (Dec. 1901): 419–20.

74. See Michelle Allen, "From Cesspool to Sewer: Sanitary Reform and the Rhetoric of Resistance, 1848–1880," *Victorian Literature and Culture* 30 (2002): 383–402.

75. Ogle, *All the Modern Conveniences,* 93–118.

76. There were some descriptions of "filth" and "nastiness" on Dupont Street; *Daily Alta California,* Nov. 22, 1853.

77. See Norman Asing, "To His Excellency Governor Bigler"(1852), in *Chinese American Voices: From the Gold Rush to the Present,* ed. Judy Yung, Gordon H. Chang, and Him Mark Lai (Berkeley: Univ. of California Press, 2006), 9–12.

78. *SF Call,* Nov. 27, 1898.

79. *SF Chronicle,* Feb. 24, 1880.

80. *SF Examiner,* Feb. 24, 1880.

81. Workingmen's Party, *Chinatown,* 15.

82. Charles Nordhoff, *California for Health, Pleasure, and Residence: A Book for Travelers and Settlers* (New York: Harper and Brothers, 1873), 91.

83. Jim Drobnick, preface to part 2, "Toposmia," in *The Smell Culture Reader,* ed. Drobnick (New York: Berg, 2006), 85–88.

84. Constance Classen, "The Odor and the Other," *Ethos* 20 (1992): 133–66. See more contributions in Drobnick, *Smell Culture Reader,* esp. Drobnick's introduction, 13–17.

85. The excerpt comes from Miriam F. Leslie, *California: A Pleasure Trip from Gotham City to the Golden Gate* (1877), reprinted in *More San Francisco Memories, 1852–1899: The Ripening Years,* comp. Malcolm E. Barker (San Francisco: Londonborn, 1996), 237.

86. Scenes from a plague epidemic that visited Rome in 1656 display public executions of people who violated quarantine laws. Guenter B. Risse, "Framing and Fighting Plague: Pestilence and Public Health," in *Mending Bodies, Saving Souls: A History of Hospitals* (New York: Oxford Univ. Press, 1999), 195–202.

87. *SF Chronicle,* Mar. 1, 1880. See also Sucheng Chan, "Hostility and Conflicts," in *Asian Americans: An Interpretive History* (Boston: Twayne, 1991), 45–61.

88. Details in Martin Melosi, *The Sanitary City: Urban Infrastructure in America from Colonial Times to the Present* (Baltimore: Johns Hopkins Univ. Press, 2000).

89. See pamphlet by Walter Wyman, *The Bubonic Plague* (Washington, DC: GPO, 1900).

90. *JAMA,* Jan. 13, 1900. See Vernon B. Link, *A History of Plague in the United States of America* (Washington, DC: GPO, 1955).

91. See William Rosen, *Justinian's Flea: The First Great Plague and the End of the Roman Empire* (New York: Penguin, 2008), and John Kelly, *The Great Mortality: An Intimate History of the Black Death* (New York: HarperCollins, 2002).

92. Wu Lien The, J. W. H. Chun, and R. Pollitzer, *Plague: A Manual for Medical and Public Health Workers* (Shanghai: Weisengshu National Quarantine Service, 1936), 13–14.

93. Myron Echenberg, "Pestis Redux: The Initial Years of the Third Bubonic Pandemic, 1894–1901," *Journal of World History* 13 (2002): 429–49.

94. Jefferys and Maxwell, "Nosogeography," in *Diseases of China,* 38.

95. For more details, see Carol Benedict, *Bubonic Plague in Nineteenth-Century China* (Stanford, CA: Stanford Univ. Press, 1996).

96. J. Dyer Ball, "Plague," in *Things Chinese, or Notes Connected with China,* 4th ed. (Hong Kong: Kelly and Walsh, 1903), 512–38.

97. Ibid., 527.

98. Andrew Cunningham, "Transforming Plague: The Laboratory and the Identity of Infectious Disease," in *The Laboratory Revolution in Medicine,* ed. Andrew Cunningham and Perry Williams (New York: Cambridge Univ. Press, 1992), 209–44.

99. S. Kitasato, "Preliminary Notice of the Bacillus of Bubonic Plague," *Lancet* 2 (1894): 428–30. Kitasato's bacillus, however, resembled a diplococcus and had culture characteristics similar to those of the pneumococcus.

100. A. Yersin, "La peste bubonique à Hong Kong," *Annales Institut Pasteur* 8 (1894): 662–67. See T. Solomon, "Alexandre Yersin and the Plague Bacillus, *Journal of Tropical Medicine and Hygiene* 98 (1995): 209–12.

101. D. J. Bibel and T.H. Chen, "Diagnosis of Plague: An Analysis of the Yersin-Kitasato Controversy," *Bacteriological Reviews* 40 (Sept. 1976): 633–51.

102. M. P. Sutphen, "Not What, but Where: Bubonic Plague and the Reception of Germ Theories in Hong Kong and Calcutta, 1894–97," *Journal of the History of Medicine and Allied Sciences* 52 (1997): 81–113.

103. Thomas Butler, *Plague and Other Yersinia Infections* (New York: Plenum, 1991), 17–18.

104. Steve Y. S. Tsang, *A Modern History of Hong Kong* (London: I. B. Tauris, 2004), 80.

105. J. M. Flint, "Notes on the Plague in China and India, " *Bulletin of the Johns Hopkins Hospital* 11 (1900): 119–27.

106. A. H. Doty, "The Plague: Its Germs and Transmission," *American Journal of Medical Sciences* 113 (1897): 258–66; W. Wyman, "The Plague: Its Treatment and Prevention," ibid., 267–74.

107. L. Fabian Hirst, *The Conquest of Plague; A Study of the Evolution of Epidemiology* (Oxford: Clarendon, 1953), 130–35.

108. Donald Gedge, "The Bubonic or Asiatic Plague: Its Symptoms and Pathology," *OMT* 10 (Oct. 1896): 585–92.

109. *SF Chronicle,* Nov. 23, 1898.

110. The SF Chinese mortuary records for Oct.–Nov. 1898 definitely show an increase in death certificates listing pneumonia and bronchitis as causes of death. Although the victims lived and died in different sections of Chinatown, they could very well have attended a communal function that would have created conditions for person-to person transmission of plague.

111. *SF Call,* Nov. 27, 1898.

112. *SF Chronicle,* Nov. 27, 1898.

113. *SF Call,* Nov. 28, 1898.

114. *SF Chronicle,* Nov. 23, 1898.

115. *SF Chronicle,* June 29, 1899. For more detail, see Robert Barde, "Prelude to the Plague: Public Health and Politics at America's Pacific Gateway, 1899," *Journal of the History of Medicine and Allied Sciences* 58 (2003): 153–86.

116. *SF Examiner,* June 30, 1899.

117. *SF Chronicle,* July 1, 1899.

118. *SF Chronicle,* July 8, 1899.

119. *SF Chronicle,* July 10, 1899; July 14, 1899.

120. Bibel and Chen, "Diagnosis of Plague," 633–51.

121. N. Howard-Jones, "Kitasato, Yersin, and the Plague Bacillus," *Clio Medica* 10 (1975): 23–27.

122. Supervisor N. McCarty also claimed that Kinyoun admitted to never seeing a case of bubonic plague in his life before the 1900 outbreak; *SF Chronicle,* July 17, 1900.

123. See the *Biennial Report of the Board of Health of the City and County of San Francisco, Fiscal Years 1898–99 and 1899–1900* (San Francisco: Hinton, 1901), 145–47.

124. Hirst, *Conquest of Plague,* 144–46.

125. A. C. Holt et al., "Spatial Analysis of Plague in California: Niche Modeling Predictions of the Current Distribution and Potential Response to Climate Change," *International Journal of Health Geographics* 8 (2009): 38–52.

126. *Transactions of the Medical Society of the State of California* 29 (1899): 1.

127. *SF Chronicle,* Aug. 23, 1891.

128. Bruno Latour, *The Pasteurization of France,* trans. A. Sheridan and J. Law (Cambridge, MA: Harvard Univ. Press, 1988), 59–110.

129. The episode, stressing the quarantine issues rather than the scientific dispute, can be found in Barde, "Prelude to the Plague."

130. W. H. Kellogg, "Present Status of Plague, with Historical Review," *American Journal of Public Health* 10 (1920): 835. See statement in the *SF Examiner,* Mar. 7, 1900.

131. For details, see James C. Mohr, *Plague and Fire: Battling Black Death and the 1900 Burning of Honolulu's Chinatown* (New York: Oxford Univ. Press, 2005).

132. *SF Chronicle,* Feb. 24, 1900.

133. Katsuki was the first Japanese with a medical degree from the University of California Medical Department. See Mohr, *Plague and Fire,* 198–99.

134. *SF Chronicle,* Feb. 22, 1900.

135. Joan B. Trauner, "The Chinese as Medical Scapegoats in San Francisco, 1870–1905," *California History* 57 (1978): 70–87.

136. *SF Examiner,* Mar. 7, 1900.

137. *SF Call,* Mar. 7, 1900.

138. *SF Examiner,* Mar. 9, 1900; *CSYP,* Mar. 8, 1900.

139. Joseph J. Kinyoun to Preston H. Bailhache, [begun] Aug. 9, 1900, p. 16, Joseph J. Kinyoun Papers, MS C 464, Modern Manuscripts Collection, National Library of Medicine, Bethesda, MD. Bailhache was a Marine Hospital Service surgeon and confidante; the letter was completed before Christmas.

140. "A Medical Harassment," *CSYP,* Mar. 8, 1900.

141. "A Medical Harassment," *CSYP,* Mar. 7, 1900.

142. The entry in the San Francisco mortuary records, erroneously dated March 13, confirms the burial site of the ashes and states the cause of death as "bubonic plague according to bacteriologist's report." Chinese Mortuary Records of the City and County of San Francisco, no. 5941, Mar. 6, 1900.

143. *SF Examiner,* Mar. 8, 1900.

144. James L. Watson, "Funeral Specialists in Cantonese Society: Pollution, Performance, and Social Hierarchy," in *Death Ritual in Late Imperial and Modern China,* ed. J. L. Watson and E. S. Rawski (Berkeley: University of California Press, 1988), 109–34.

145. *CSYP,* Mar. 21, 1900.

146. Richard J. Smith, *China's Cultural Heritage: The Qing Dynasty, 1644–1912* (Boulder, CO: Westview, 1994), 174–76. See also Chee K. Tong, *Chinese Death Rituals in Singapore* (London: Routledge, 2004), 105–21.

147. Myron L. Cohen, "Soul and Salvation: Conflicting Themes in Chinese Popular Religion," in Watson and Rawski, *Death Ritual,* 180–202.

148. Richard von Glahn, *The Sinister Way: The Divine and Demonic in Chinese Religious Culture* (Berkeley: Univ. of California Press, 2004), 1–18.

CHAPTER FOUR: Officials, Mandarins, and the Press

1. F.M. Todd, *The Chamber of Commerce Handbook for San Francisco* (San Francisco, 1914), 16. For early historical details, see John S. Hittel, *A History of the City of*

San Francisco, and Incidentally of the State of California (San Francisco: A. L. Bancroft, 1878).

2. *SF Chronicle,* Sept. 19, 1899.

3. *SF Chronicle,* Mar. 4, 1900. Details in Philip J. Ethington, *The Public City: The Political Construction of Urban Life in San Francisco, 1850–1900* (Berkeley: Univ. of California Press, 2001). Information is also available through the *Encyclopedia of San Francisco,* a web-based project of the San Francisco Museum and Historical Society, www.sfhistoryencyclopedia.com.

4. In July 1900, Phelan was listed as owner of a property located on the western side of Dupont between Clay and Sacramento Streets.

5. For more information on Phelan, see James D. Phelan Papers, 1880–1930, Bancroft Library, Univ. of California, Berkeley.

6. William Issel and Robert W. Cherny, *San Francisco, 1865–1932: Politics, Power, and Urban Development* (Berkeley: Univ. of California Press, 1986), 139–54.

7. For details, see William G. Robbins, *Colony and Empire: The Capitalist Transformation of the American West* (Lawrence: Univ. of Kansas Press, 1994).

8. *SF Chronicle,* Oct. 26, 1897.

9. J. Fell, "The Dumps," in *British Merchant Seamen in San Francisco, 1892–98* (London, 1899), reprinted in *More San Francisco Memoirs, 1852–1899,* comp. Malcolm E. Barker (San Francisco: Londonborn, 1996), 279–81.

10. *Public Health Reports* 14 (Nov. 10, 1899): 1960–83.

11. Editorial, "New San Francisco," *OMT* 14 (1900): 19–20.

12. *SF Chronicle,* Sept. 15, 1899.

13. *SF Chronicle,* Sept. 19, 1899. See also Terrence J. McDonald, "Urban Development, Political Power, and Municipal Expenditure in San Francisco, 1860–1910: A Quantitative Investigation of Historical Theory" (Ph.D. diss., Stanford University, 1979).

14. See Ethington, *Public City.*

15. For details, see G. B. Risse, "The Politics of Fear: Bubonic Plague in San Francisco, California, 1900," in *New Countries and Old Medicine,* ed. L. Bryder and D. A. Dow (Auckland, NZ: Pyramid Press, 1995), 1–19.

16. *SF Chronicle,* Jan. 8, 1900.

17. *SF Examiner,* Jan. 17, 1900.

18. Details in Kevin J. Mullen, *Chinatown Squad: Policing the Dragon from the Gold Rush to the 21st Century* (Novato, CA: Noir, 2008).

19. *SF Examiner,* Feb. 24, 1880. The sums were not insignificant: $300–700 per month.

20. In 1900, Health Officer O'Brien earned $3,000 per year. For comparison purposes, Mayor Phelan made $6,000, a 100% increase over his 1899 pay. Police chief Sullivan received $4,000. Kellogg's pay had been upgraded to $1,800 from $1,200 for his predecessor, reaching parity with the salaries paid to the chemist and veterinary surgeon. The chief plumbing inspector was not far behind with $1,500, and the clerk of vital statistics drew $1,200. Information obtained from San Francisco city directories. See also *SF Chronicle,* Feb. 20, 1900.

21. *SF Chronicle,* Feb. 22, 1900.

22. *SF Chronicle,* May 18, 1900.

23. The 38-year-old professor of physiology and microscopy at the University of California Medical Department had embarked on a part-time political career just a year after assuming the deanship of his alma mater.

24. *SF Chronicle,* Oct. 6, 1899; Feb. 15, 1900.

25. Joseph J. Kinyoun to Aunt and Uncle, June 19, 1901, p. 7, Joseph J. Kinyoun Papers, MS C 464, Modern Manuscript Collection, National Library of Medicine, Bethesda, MD.

26. Details in Kim Man Chan, "Mandarins in America: The Early Chinese Ministers to the United States, 1878–1907" (Ph.D. diss., Univ. of Hawaii, 1981), 369–481.

27. Zhan Yinhun, Chinese minister to the United States from 1886 to 1889, recalled in his diary a meeting with the Chinese leadership in San Francisco on Apr. 10, 1886, where he exhorted them to live like one big family, respecting each other. "Meeting with SF Chinese," in *Land without Ghosts: Chinese Impressions of America from the Mid-Nineteenth Century to the Present,* trans. and ed. R. David Arkush and Leo O. Lee (Berkeley: Univ. of California Press, 1989), 72–73.

28. *SF Chronicle,* Dec. 31, 1896.

29. *SF Chronicle,* Mar. 5, 1897.

30. *SF Chronicle,* Mar. 26, 1897.

31. Linda Pomeranz-Zhang, *Wu Tingfang (1842–1922): Reform and Modernization in Modern Chinese History* (Hong Kong: Hong Kong Univ. Press, 1992), 103–36.

32. *SF Chronicle,* Apr. 15, 1897.

33. Ho Tsun Shin (also known as Ho Fuk Tong), was also a typical "compradore"—a native agent for foreign trading companies—who had amassed millions together with vast real estate holdings in the colony.

34. *SF Call,* Sept. 21, 1897.

35. *SF Chronicle,* Nov. 25, 1897.

36. *SF Chronicle,* Dec. 2, 1898.

37. *SF Call,* July 22, 1900.

38. *SF Chronicle,* May 24, 1899.

39. *SF Chronicle,* Apr. 14, 1899.

40. *SF Chronicle,* July 5, 1899.

41. Interview, in *Report of the Industrial Commission on Immigration and Education* (Washington, DC: GPO, 1901), 15:791–92.

42. *SF Chronicle,* Jan. 9, 1900.

43. *SF Chronicle,* Mar. 7, 1900.

44. Details in Gertrude F. H. Atherton, *California: An Intimate History* (New York: Harper and Bros., 1914). Also see William Deverell and David Igler, eds., *A Companion to California History* (Malden, MA: Wiley-Blackwell, 2008).

45. H. Brett Melendy and Benjamin F. Gilbert, "Henry T. Gage," in *The Governors of California, Peter H. Burnett to Edmund G. Brown* (Georgetown, CA: Talisman, 1965), 259–71.

46. Mansel G. Blackford, *The Politics of Business in California, 1890–1920* (Columbus: Ohio State Univ. Press, 1977).

47. *SF Chronicle,* Jan. 5, 1899.

48. For background, see William F. Deverell, *Californians and the Railroad, 1850–1910* (Berkeley: Univ. of California Press, 1994).

49. Gage's inaugural address, delivered on Jan. 4, 1899 is available at http://governors.library.ca.gov/addresses/20-gage.html. For background information, see Andrew F. Rolle and John S. Gaines, *The Golden State: California History and Government* (Arlington Heights, IL: Harlan Davidson, 1990).

50. Guy P. Jones, "Thomas M. Logan M.D., Organizer of California's Board of Health," *California Health* 2 (Mar. 1941): 129–33.

51. Guy P. Jones, "Early Public Health in California," *California Health* 2 (Apr. 1945): 145–60; (June 1945): 177–79.

52. *NY Times,* Sept. 15, 1899.

53. *SF Chronicle,* Sept. 16, 1899.

54. *SF Chronicle,* Feb. 9, 1900. See also Kinyoun to Preston H. Bailhache, "re: Plague in San Francisco 1900," [begun] Aug. 9, 1900, p. 3, Kinyoun Papers. A documentary background of California's legislative and political activities can be found in Franklin Hichborn, *California Politics, 1891–1939,* 5 vols. (Los Angeles: J. T. Haynes Foundation, 1950).

55. *SF Examiner,* Sept. 1, 1884.

56. "Quarantine at San Francisco," *Pacific Medical and Surgical Journal* 31 (June 1888): 347–49.

57. *SF Call,* July 27, 1897.

58. *SF Call,* Aug. 18, 1897.

59. *SF Chronicle,* Oct. 26, 1897.

60. *SF Chronicle,* Aug. 26, 1899.

61. In 1898 Chalmers had been busy; he reported inspecting 568 vessels and adding $3,700 to the SF Health Department coffers.

62. *SF Chronicle,* July 21, 1899.

63. *SF Chronicle,* Aug. 28, 1899.

64. *SF Chronicle,* July 21, 1899.

65. *SF Examiner,* Jan. 10, 1900.

66. Based on the 1889 act, Marine Hospital Service medical officers were appointed by the president with the advice and consent of the Senate. Candidates had to pass an examination in medicine, surgery, and hygiene.

67. For a general overview, see Fitzhugh Mullan, *Plagues and Politics: The Story of the United States Public Health Service* (New York: Basic Books, 1989).

68. See Margaret Humphries, *Yellow Fever and the South* (New Brunswick, NJ: Rutgers University Press, 1992), esp. 128–45.

69. Alan M. Kraut, *Silent Travelers: Germs, Genes, and the "Immigrant Menace"* (New York: Basic Books, 1993), 50–77.

70. Ralph C. Williams, *The United States Public Health Service, 1798–1850* (Washington, DC: COAUSPHS, 1951), 75–85.

71. *Annual Report of the Supervising Surgeon General for the Marine Hospital Service of the United States for the Fiscal Year 1896* (Washington, DC: GPO, 1896), 547.

72. *New York Times,* Feb. 1, 1898. See also James A. Tobey, *The National Government and Public Health* (Baltimore: Johns Hopkins Univ. Press, 1926).

73. *JAMA* 34 (June 1900): 1549–50. See also M. Wasserman, "The Quest for a National Health Department in the Progressive Era," *BHM* 49 (1975): 353–80. Efforts to avoid congressional action designed to curtail the service's powers are discussed in Kinyoun to Bailhache, Aug. 9, 1900, pp. 23–24.

74. 58 Cong. Rec. 38–47 (1905) (General Deficiency Bill, H.R., Appropriations, Feb. 18).

75. For details on Wyman (1848–1911), see Victoria Harden, *Inventing the N.I.H.: Federal Biomedical Research Policy, 1887–1937* (Baltimore: Johns Hopkins Univ. Press, 1986).

76. With a hat plumed with two black ostrich feathers, silk and gold sash and epaulets, Wyman "cut a fine figure." Bess Furman, *A Profile of the United States Public Health Service, 1798–1948* (Washington, DC: NIH/GPO, 1973), 212. Wyman earned $5,000 a year.

77. W. Wyman, "Sanitation and Progress, " *JAMA* 36 (Mar. 1901): 609.

78. Merril E. Gates, *Men of Mark in America* (Washington, DC: Men of Mark, 1906), 1:430–34.

79. W. Wyman, "The Black Plague," *North American Review,* Apr. 1897, 441–52.

80. Quoted in the *Evening Bee,* Feb. 10, 1900. Wyman's "timely" publication was distributed by the Government Printing Office in early 1900. *JAMA* 34 (Feb. 1900): 371.

81. H. S. Cumming, "The San Francisco Quarantine Station," *CSJM* 1 (Oct. 1903): 324–29.

82. *Annual Report of the Supervising Surgeon General for the Marine Hospital Service of the United States for the Fiscal Year 1897* (Washington, DC: GPO, 1899), 503.

83. "San Francisco's Barriers against Oriental Plagues," *SF Call,* Sept. 6, 1896; "Deadly Bacilli of the Black Plague," *SF Call,* Oct. 30, 1898.

84. Marine Hospital Service surgeon Brooks was in charge during the brief interlude between the Rosenau and Kinyoun tenures.

85. Kinyoun (1860–1919) was appointed to the post of federal quarantine officer at the Angel Island Quarantine Station on Apr. 27, 1899. He earned $3,000 a year.

86. For a biographical sketch, see Victoria A. Harden, "Joseph James Kinyoun," in *American National Biography* (Cary, NC: Oxford University Press, 1999), 12:736–37.

87. Joseph J. Kinyoun to Aunt and Uncle, June 19, 1901, p. 34, Kinyoun Papers.

88. Both Kinyoun and Wyman contended to be excellent bacteriologists, but neither had direct experience with plague. In Kinyoun's opinion, Wyman's 1900 publication on bubonic plague confused both physicians and informed laypersons.

89. See Kinyoun's report in *Annual Report of the Supervising Surgeon General for the Marine Hospital Service of the United States for the Fiscal Year 1899* (Washington, DC: GPO, 1901), 819–23.

90. Alan Mayne, "Drama: Eradicating Plague from San Francisco, 1900–1909," in *The Imagined Slum: Newspaper Representation in Three Cities, 1870–1914* (London: Leicester Univ. Press, 1993), 28–56. Media dependency is a growing field of study that examines the mutual and complex relations between various social systems and the press. See J. Gerard Power, "Media Dependency, Bubonic Plague, and the Social Construction of the Chinese Order," *Journal of Communication Inquiry* 19 (Spring 1995): 89–110.

91. The term, derived from a New York cartoon character, Yellow Kid, became associated with newspaper sensationalism, practiced under extreme competition between Pulitzer's *NY World* and Hearst's *NY Journal*. Ted C. Smythe, *The Gilded Age Press, 1865–1900* (Westport, CT: Praeger, 2003), 173–202, esp. 182–84.

92. W. Joseph Campbell, *Yellow Journalism: Puncturing the Myths, Defining the Legacies* (Westport, CT: Praeger, 2001), 1–22.

93. *The San Francisco Chronicle and Its History* (San Francisco, 1879).

94. John P. Young, *San Francisco,* 2 vols. (Chicago: S. J. Clarke, 1912), 2:780.

95. Charles A. Bates, *American Journalism from the Practical Side* (New York: Holmes, 1897), 307.

96. For details, see Sidney Kobre, *The Yellow Press and Gilded Age Journalism* (Tallahassee: Florida State Univ. Press, 1964), 59–64, and Ben Proctor, *William Randolph Hearst: The Early Years, 1863–1910* (New York: Oxford Univ. Press, 1998).

97. A sample of the vivid prose was the portrait of Chinese consul general Ho Yow during a meeting at the Chamber of Commerce to discuss amending the Exclusion Act: "Great is Ho Yow and John Bennett (Western attorney) is his Prophet. Not since the days of good old Colonel Bee of the oily tongue has there been such an air of Oriental diplomacy about the local Chinese Consulate. For the fires of sandalwood punk are lighted and fairy tales are told, for public sentiment is to be made and white men merchants are being used therefore." *SF Examiner,* Mar. 30, 1900.

98. *SF Call,* Mar. 9, 1900.

99. McClatchy Newspapers and Broadcasting Collection, at www.oac.cdlib.org.

100. Stewart Culin, *China in America: A Study of the Social Life in the Chinese and the Eastern Cities of the U.S.* (Philadelphia, 1887), 13.

101. E. Robinson, "Chinese Journalism in America," *Current Literature* 32 (Mar. 1902): 325.

102. See Karl Lo and Him Lai, comp., *Chinese Newspapers Published in North America, 1854–1975* (Washington DC: Center for Chinese Research Materials, 1977).

103. Corinne K. Hoexter, "Peasant Boy from Kwangtung," in *From Canton to California: The Epic of Chinese Immigration* (New York: Four Winds, 1976), 135–85.

104. *CSYP,* Feb. 14, 1900. Copies of the *Chung Sai Yat Po* from 1900 to 1950 are available on microfilm from the C.V. Starr East Asian Library at the University of California, Berkeley.

105. Ibid.

106. *CSYP,* Feb. 16, 1900.

107. *CSYP,* Feb. 14, 1900.

108. This topic is covered in Jeffrey N. Wasserstrom and Sin-Kong Wong, "Taunting the Turtles and Damning the Dogs: Animal Epithets and Political Conflict in Modern China," Indiana East Asian Working Paper Series on Language and Politics in Modern China no. 9 (Bloomington: East Asian Studies Center, Indiana University, 1996), 23–59.

109. *New York Times,* Dec. 9, 1905.

110. For details, see Hope B. Werness, *The Continuum Encyclopedia of Animal Symbolism in Art* (New York: Continuum, 2004).

111. *CSYP,* Aug. 8, 1900.

112. *CSYP,* Feb. 16, 1900.

113. C. F. Holder, "The Chinese Press in America, " *Scientific American* 87 (Oct. 11, 1902): 241.

114. Morrisson Pixley, "A Chinese Newspaper in America," *World's Work* 3 (1902): 1950–53. For details, see Ronald L. Soble, "A History of the *Chinese World,* 1891–1961" (MA thesis, Stanford University, 1962).

115. Yong Chen, *Chinese San Francisco, 1850–1943: A Trans-Pacific Community* (Stanford, CA: Stanford Univ. Press, 2000), 5; Yumei Sun, "San Francisco's *Chung Sai Yat Po* and the transformation of Chinese Consciousness, 1900–1920," in *Print Culture in a Diverse America,* ed. James P. Dansky and Wayne A. Wiegand (Urbana: Univ. of Illinois Press, 1998).

116. For details, see Yumei Sun, "From Isolation to Participation: *Chung Sai Yat Po* (China West Daily) and San Francisco's Chinatown, 1900–1920" (Ph.D. diss., Univ. of Maryland, 1999).

CHAPTER FIVE: Early Scenes of Terror

Epigraph. CSYP, June 4, 1900.

1. *SF Bulletin,* Mar. 7, 1900.

2. *SF Examiner,* Mar. 7, 1900.

3. *SF Chronicle,* Mar. 9, 1900.

4. *SF Chronicle,* Mar. 7, 1900.

5. Wyman to Gassaway, Mar. 8, 1900, in *Annual Report of the Supervising Surgeon General for the Marine Hospital Service of the United States for the Fiscal Year 1900* (Washington, DC: GPO, 1900), 531. Waldemar M. C. Haffkine was a student of Elie Metchnikoff at the University of Odessa. He worked on plague in Bombay in 1896, developing a protective vaccine. His first successful trials were carried out in 1897 among the general population there. W. M. Haffkine, "Remarks on the Plague Prophylactic Fluid, *British Medical Journal* 1 (1897): 1461.

6. Yersin's anti-pest serum could be given in doses of 5–10cc for a quick, two-week protection, but its main purpose was therapeutic. Wyman suggested a total injection

of 120 cc during the first forty-eight hours of the disease in separate doses of 20–40 cc each.

7. *SF Chronicle,* Mar. 8, 1900.

8. "Rats for Plague Tests," *CSYP,* Mar. 8, 1900.

9. *SF Examiner,* Mar. 8, 1900. For a summary of the plague outbreak, see Myron Echenberg, "Black Plague Creeps into America," in *Plague Ports: The Global Urban Impact of Bubonic Plague, 1894–1901* (New York: New York Univ. Press, 2007), 286–323.

10. Kinyoun to Wyman, Mar. 8, 1900, in *Annual Report of the Surgeon General 1900,* 531.

11. Dr. E. O. Jellinek, "recognized in Europe as an expert in bacteriology"; *SF Chronicle,* Mar. 9, 1900.

12. *SF Chronicle,* Mar. 10, 1900.

13. *SF Call,* Mar. 8, 1900.

14. *CSYP,* Mar. 10, 1900.

15. Gassaway to Wyman, Mar. 14, 1900, in *Annual Report of the Surgeon General 1900,* 532–33.

16. *SF Chronicle,* Mar. 13, 1900.

17. *SF Examiner,* Mar. 13, 1900.

18. "Rats Are Dead Because of Plague," *CSYP,* Mar. 23, 1900.

19. *SF Chronicle,* Mar. 15, 1900.

20. *SF Chronicle,* Mar. 17, 1900.

21. *SF Examiner,* Mar. 18, 1900. See also Glennan to Wyman, Mar. 29, 1900, RPHS.

22. "A New Medical Regulation," *CSYP,* Mar. 10, 1900.

23. "Remains Are Not Allowed to Be Buried," *CSYP,* Mar. 17, 1900.

24. *NY Journal,* Mar. 18, 1900. A real eye-catcher was a drawing depicting the face of a rich man; turned upside down, the image revealed an emaciated "plague" victim.

25. *SF Call,* Mar. 20 and 28, 1900.

26. *SF Chronicle,* Mar. 22, 1900.

27. "Harassed by Evil Health Officer," *CSYP,* Mar. 19, 1900.

28. "Asking for Protection," *CSYP,* Mar. 21, 1900.

29. "False Accusations Hamper Trade," *CSYP,* Mar. 24, 1900; *SF Bulletin,* Mar. 27, 1900.

30. *SF Examiner,* Mar. 24, 1900. See also "Taking Opportunities to Steal," *CSYP,* Mar. 27, 1900.

31. "A Case of Poisoning," *CSYP,* Mar. 27, 1900.

32. "Roots of Plague Rumor Are Money," *CSYP,* Mar. 24, 1900.

33. *SF Chronicle,* Mar. 27, 1900.

34. The Health Board actions were forcefully defended: "The Plague and the Board of Health," *OMT* 14 (Apr. 1900): 116–22.

35. *SF Chronicle,* Mar. 30, 1900.

36. "Evil Scheming Disclosed," *CSYP,* June 7, 1900.

37. *Public Health Reports* 15 (May 25, 1900): 1254.

38. *Annual Report of the Surgeon General 1900,* 498.

39. *OMT* 14 (July 1900): 220.

40. Kinyoun to Wyman, May 15, 1900, in *Annual Report of the Surgeon General 1900,* 537. Haffkine's vaccine, composed of killed plague bacilli in a broth culture, had been developed three years earlier in India. Given as a prophylactic, 1cc of the vaccine was thought to confer an immunity for several weeks.

41. Wyman to Kinyoun, May 19, 1900, National Archives II.

42. Wyman to Wu Ting Fang, May 15, 1900, National Archives II. See also *Public Health Reports* 15 (May 25, 1900): 1255–59.

43. Kinyoun to Wyman, *Public Health Reports* 15 (July 6, 1900): 1692–95.

44. Kinyoun to Wyman, June 11, 1900, in *Annual Report of the Surgeon General 1900,* 558–59.

45. "Treating Diseased Rats," *CSYP,* June 11, 1901.

46. "What We Should Do ABOUT Inoculation," *CSYP,* May 18, 1900.

47. "The Background of Vaccination," *CSYP,* May 19, 1900.

48. W. C. Hassler, "The Methods Employed in the Eradicating of an Infectious Disease in the Chinese Quarter of San Francisco," *CSJM* 3 (Dec. 1905): 390.

49. "The Efficacy of Vaccine," *CSYP,* May 19, 1900.

50. *SF Examiner,* May 31, 1900.

51. "Health Officer Came to Our Offices," *CSYP,* May 19, 1900.

52. *SF Examiner,* June 1, 1900.

53. "Public Justice," *CSYP,* May 22, 1900.

54. "Empathy, Kindness, and No Tolerance for Injustice," *CSYP,* May 22, 1900.

55. Wyman to Kinyoun, May 15, 1900.

56. Kinyoun to Wyman, June 11, 1900, in *Public Health Reports* 15 (July 6, 1900): 1692–95.

57. Ibid., 1694.

58. H. D. Geddings, "The Haffkine Prophylactic against Plague and a Comparison of its Action with Antipest Serum," *Public Health Reports* 15 (Aug. 31, 1900): 2135–41.

59. *SF Chronicle,* May 22, 1900.

60. Ibid.

61. Ibid.

62. Ibid.

63. Wong Wai v. Williamson et al., 103 F. 1 (N.D. Calif., 1900).

64. As Japanese were also included in the planned travel ban, their community joined in the legal action.

65. Also participating were Samuel M. Shortridge, a prominent attorney working for the Chinese Empire Reform Association, and Bennett, once again representing the Chinese consulate. U.S. District Attorney for the Northern California District Frank L. Coombs represented Kinyoun while Charles L. Weller, an assistant district attorney, defended the health board.

66. For details, see C. McClain, "Of Medicine, Race, and American Law: The Bubonic Plague Outbreak of 1900," *Law and Social Inquiry* 13 (1988): 447–70.

67. "Most Gratifying News," *CSYP,* May 28, 1900.

68. Kinyoun to Wyman, May 28, 1900, in *Annual Report of the Surgeon General 1900,* 549.

69. Hassler, "Methods Employed," 390.

70. H. A. L. Ryfkogel, "The Present Pandemic of Bubonic Plague," *Transactions of the Medical Society of the State of California* 30 (Apr. 1900): 21–28.

71. P. L. Simond, "La propagation de la peste," *Annales Institut Pasteur* 12 (1898): 625–87. Simond was director of the Pasteur Institute in Saigon. See Marc Simond et al., "Paul-Louis Simond and His Discovery of Plague Transmission by Rat Fleas: A Centenary," *Journal of the Royal Society of Medicine* 91 (Feb. 1998): 101–4.

72. George H. F. Nutall conducted a series of experiments with fleas, concluding that they digested bacteria.

73. *SF Examiner,* May 31, 1900.

74. Ibid.

75. M. Michelson, "The Terror of Quarantine to an Unsophisticated Chinese Woman," *SF Bulletin,* June 10, 1900.

76. Hassler, "Methods Employed," 390.

77. "Opportunities to Steal," *CSYP,* Mar. 27, 1900.

78. See Milton J. Rosenau, *Disinfection and Disinfectants. A Practical Guide for Sanitarians, Health, and Quarantine Officers* (Philadelphia: Blakiston's Sons, 1902), 84–156.

79. *SF Bulletin,* June 4 and June 5, 1900.

80. "Plague Diagnosis," *CSYP,* June 9, 1900.

81. *CSYP,* June 4, 1900.

82. "Notification," *CSYP,* July 20, 1900.

83. "We Should Be Vigilant," *CSYP,* June 20, 1900.

84. Fitch, Atterbury, and Worley steadfastly denied the existence of plague. *SF Call,* Mar. 22, 1900.

85. After leaving Chinatown, some of the Western physicians were detained and quarantined in their own homes, accused of being at risk of spreading plague. "Detention," *CSYP,* June 4, 1900.

86. "They work the certificate business very successfully," Hay declared during a discussion. *OMT* 15 (July 1900): 221.

87. Hay's paper, delivered on May 28, 1900, was later published as "The Plague in Chinatown," *OMT* 15 (Aug. 1900): 251–3.

88. "Stop Abuse," *CSYP,* June 4, 1900.

89. According the *SF Chronicle,* the man "had been prominently identified with the business interests of the colony" for fifteen years and his sickness—venereal in nature—was known during the 18 months of its course to most of his acquaintances; May 30, 1900.

90. "Give No Credit to Rumors," *CSYP,* May 30, 1900.

91. "Dang's Dissection," *CSYP,* May 30, 1900.

92. *SF Chronicle,* June 1, 1900.
93. "Don't Believe What People Say," *CSYP,* May 30, 1900.
94. *SF Chronicle,* May 31, 1900.
95. *SF Chronicle,* June 2, 1900.
96. *SF Chronicle,* July 17, 1900.
97. "Fox Borrowed Power from Tiger," *CSYP,* June 4, 1900.
98. "How Bacteriology Fails to Prove Plague in San Francisco," *Pacific Medical Journal* 43 (July 1900): 499–503.
99. *CSYP,* June 9, 1900.
100. *SF Chronicle,* May 31, 1900.
101. *SF Examiner,* June 1, 1900.
102. *SF Chronicle,* May 31, 1900.
103. *SF Bulletin,* June 2, 1900.
104. "All Details Revealed," *CSYP,* June 4, 1900.
105. "Facing the Possible Razing of Chinatown," *CSYP,* June 1, 1900.
106. *CSYP,* June 16, 1900.
107. *SF Examiner,* June 2, 1900.
108. *SF Bulletin,* May 31, 1900.
109. *SF Chronicle,* June 6, 1900.
110. *SF Examiner,* June 1, 1900.
111. *SF Bulletin,* June 3, 1900.
112. Jew Ho v. Williamson et al., 103 F. 10 (N.D. Calif., 1900). The plaintiff was represented by Reddy, Campbell and Metson, Maguire and Gallagher, Samuel M. Shortridge, and John E. Bennett.
113. *SF Chronicle,* June 6, 1900.
114. *SF Chronicle,* June 4, 1900.
115. *SF Call,* June 7, 1900.
116. *SF Call,* June 8, 1900.
117. *SF Call,* June 12, 1900.
118. *SF Call,* June 10, 1900.
119. "Blackmailing the Chinese to End Quarantine," *CSYP,* June 7, 1900. See also Kinyoun to Preston H. Bailhache, [begun] Aug. 9, 1900, p. 7, Joseph J. Kinyoun Papers, MS C 464, Modern Manuscripts Collection, National Library of Medicine, Bethesda, MD.
120. *SF Call,* June 10, 1900.
121. *SF Bulletin,* June 10, 1900.
122. *SF Call,* June 15, 1900.
123. Kinyoun to Bailhache, p. 14.
124. *SF Chronicle,* June 6, 1900.
125. "Activities of American Ministers," *CSYP,* June 11, 1900.
126. *SF Call,* June 12, 1900.
127. *SF Chronicle,* June 4, 1900.
128. *SF Call,* June 13, 1900.

129. For context and detail, see McClain, "Of Medicine, Race, and American Law," 496–503.

130. *SF Examiner,* June 16, 1900.

CHAPTER SIX: The Siege Continues

1. See Presidential Memorandum, May 21, 1900, in *Annual Report of the Supervising Surgeon General for the Marine Hospital Service of the United States for the Fiscal Year 1900* (Washington, DC: GPO, 1900), 542.

2. L. J. Gage, secretary of the Treasury, "Interstate Quarantine Regulations to Prevent the Spread of Plague in the United States," May 22, 1900, in ibid., 543.

3. "Not receiving any orders to the contrary, I had to enforce a quarantine and carry out my instructions"; Kinyoun to Preston H. Bailhache, [begun] Aug. 9, 1900, p. 14, Joseph J. Kinyoun Papers, MS C 464, Modern Manuscripts Collection, National Library of Medicine, Bethesda, MD.

4. *SF Examiner,* June 17, 1900.

5. *SF Call,* June 18, 1900.

6. *SF Examiner,* June 18, 1900.

7. *SF Call,* June 18, 1900.

8. *SF Chronicle,* June 17, 1900.

9. *SF Call,* June 17, 1900.

10. *SF Examiner,* June 17, 1900.

11. Earlier, the reporter had roamed through Chinatown without being vaccinated or having his clothing fumigated. *SF Chronicle,* June 17, 1900.

12. Kinyoun to Bailhache, p. 8 and p. 35.

13. Wong Wai v. Williamson et al., 103 F. 1 (N.D. Calif., 1900). See C. McClain, "Of Medicine, Race, and American Law: The Bubonic Plague Outbreak of 1900," *Law and Social Inquiry* 13 (1988): 505–6.

14. *SF Chronicle,* June 18, 1900.

15. Wyman to Kinyoun, June 17, 1900, in *Annual Report of the Surgeon General 1900,* 566.

16. *SF Examiner,* June 19, 1900.

17. *SF Call,* June 18, 1900.

18. Wyman to Kinyoun, telegram, June 18, 1900, in *Annual Report of the Surgeon General 1900,* 566.

19. Spaulding to Governor of California, *SF Examiner,* June 18, 1900. A friend of Kinyoun, Spaulding tried to cushion his fall from grace among politicians and bureaucrats in Washington.

20. Kinyoun to Bailhache, p. 11.

21. Kinyoun claimed that the Chinese leadership spent $20,000 in legal fees to prosecute its lawsuits; ibid., p. 6.

22. Ibid., p. 17.

23. Ibid. p. 18.

24. *Public Health Reports* 15 (July 6, 1900): 1692.
25. Kinyoun to Bailhache, p.12.
26. *SF Chronicle,* June 19, 1900.
27. *SF Call,* July 4, 1900.
28. *CSYP,* July 5, 1900.
29. *SF Chronicle,* July 13, 1900.
30. Kinyoun to Wyman, Oct. 10, 1900, RPHS.
31. Ibid.
32. Kinyoun to Bailhache, p. 19.
33. *SF Call,* June 24, 1900.
34. James C. Mohr, *Plague and Fire: Battling Black Death and the 1900 Burning of Honolulu's Chinatown* (New York: Oxford Univ. Press, 2005), 104.
35. This focus on contaminated soil may have been the result of Kitasato's participation in studies on tetanus, cholera, typhoid, and anthrax performed between 1885 and 1892 at Koch's laboratory.
36. *SF Examiner,* June 16, 1900.
37. "Testing for Plague," *CSYP,* Mar. 8, 1900.
38. *SF Examiner,* Mar. 7, 1900.
39. *SF Chronicle,* Mar. 17, 1900.
40. *SF Bull,* May 31, 1900.
41. *SF Call,* May 31, 1900.
42. "A Proposal for Burning Down Chinatown," *CSYP,* May 31, 1900.
43. "Relocation of Chinese," *CSYP,* June 5, 1900.
44. *SF Chronicle,* June 29, 1900.
45. *SF Examiner,* July 4, 1900.
46. *SF Chronicle,* July 1, 1900
47. *SF Chronicle,* June 28, 1900.
48. *SF Chronicle,* July 1, 1900.
49. *SF Chronicle,* June 29, 1900.
50. *SF Chronicle,* July 1, 1900.
51. An example of successful urban renewal was the transformation of New York City's Five Points, a notorious slum during the mid-nineteenth-century cholera epidemics, into a respectable section of Manhattan.
52. "Opinions on the Removal of Chinatown," *CSYP,* July 5, 1900.
53. "Chinatown's Sanitation," *CSYP,* July 5, 1900.
54. *SF Chronicle,* July 6, 1900.
55. *SF Call,* July 6, 1900.
56. *SF Call,* July 9, 1900.
57. *SF Chronicle,* July 9, 1900.
58. *SF Chronicle,* Oct. 5, 1900.
59. Ibid.
60. Ibid.
61. *SF Chronicle,* Oct. 6, 1900.

62. Ibid.

63. Kinyoun to Wyman, Dec. 6, 1900, RPHS.

64. Joseph H. Kinyoun, report to Wyman, Dec. 6, 1900, reprinted in *Annual Report of the Supervising Surgeon General for the Marine Hospital Service of the United States for the Fiscal Year 1901* (Washington, DC: GPO, 1902), 498.

65. L. S. McClung and K.F. Meyer, "Beginnings of Bacteriology in California," *Bacteriology Reviews* 38 (Sept. 1974): 251–71. See also contributions in Andrew Cunningham and Perry Williams, eds., *The Laboratory Revolution in Medicine* (Cambridge: Cambridge Univ. Press, 1992).

66. "Stop Abuse," *CSYP,* June 4, 1900.

67. *SF Call,* June 3, 1900.

68. "The Plague," *OMT* 14 (July 1900): 210–17.

69. *SF Bull,* June 10, 1900. Li Po Tai, the famous Chinese physician practicing in nineteenth-century Chinatown, found this fear absurd. *SF Chronicle,* Mar. 21, 1893.

70. Biennial Health Board Report 1898–1900, in *San Francisco Municipal Reports for the Fiscal Year 1900–1901* (San Francisco, 1901), 145–48.

71. *SF Chronicle,* June 2, 1900. Kinyoun would later patronizingly characterize Kellogg as a "young man" with no plague experience but also as a "friend" worth mentoring. Kinyoun to Aunt and Uncle, June 29, 1901, p. 7, Kinyoun Papers.

72. *SF Chronicle,* June 5, 1900.

73. *SF Examiner,* June 7, 1900.

74. *SF Chronicle,* June 23, 1900. According to Kinyoun, the inspectors received $10 from the State Health Board and $25 from the Chinese Six Companies for every case they visited and reported. Kinyoun to Bailhache, p. 7.

75. *SF Chronicle,* June 12, 1900.

76. *SF Chronicle,* June 15, 1900. Anderson published "Bubonic Plague: Its Presentation and Cure," Pacific Medical Journal 44 (1901): 22–25.

77. C. Ellinswood, "The Mysteries of Plague, Past and Present," *OMT* 17 (1903): 336–43.

78. *SF Chronicle,* June 17, 1900.

79. *SF Chronicle,* June 18, 1900.

80. *CSYP,* June 19, 1900.

81. "The San Francisco Medical Society and the Plague," *OMT* 14 (July 1900): 218–19.

82. *SF Chronicle,* June 24, 1900.

83. *SF Call,* June 26, 1900.

84. Kinyoun to Wyman, Oct. 10, 1900, RPHS.

85. An extensive report of Lee's autopsy was sent to the San Francisco Health Board on July 16 and published in *JAMA* 35 (July 14, 1900): 100–101, as well as by Kellogg in *OMT* 14 (Aug. 1900): 245–50.

86. *SF Chronicle,* July 26, 1900.

87. *CSYP,* Aug. 1, 1900.

88. *OMT* 14 (Nov. 1900): 346–47.

89. Sternberg (1838–1915) was primarily involved with epidemics of typhoid and yellow fever. *Pacific Medical Journal* 43 (Dec. 1900): 912. He was invited to visit Mouser's laboratory but refused to get involved in the diagnostic disputes; *OMT* 15 (Jan. 1901): 27.

90. *OMT* 14 (Sept. 1900): 285.

91. "Recent Deaths," *CSYP,* Aug. 1, 1900.

92. A. Yersin, "Sur la peste bubonique (Serotherapie)," *Annales Institut Pasteur* 11 (1897): 81–93.

93. Kinyoun to Williamson, July 31, 1900, reprinted in *OMT* 14 (Aug. 1900): 250–51.

94. Kinyoun, report to Wyman, Dec. 6, 1900, in *Annual Report of the Surgeon General 1901,* 495–97.

95. Ho Yow, "The Attitude of the United States towards the Chinese," *Forum* 29 (June 1900): 385–96.

96. Ho Yow, *Western Benefits through China's Development* (San Francisco: Mysell-Rollins, 1900), 1–6. This pamphlet reprinted an article that appeared in *Forum* 29 (March 1900): 79–92.

97. A contemporary source is Arthur H. Smith, *China in Convulsion* (New York: F. H. Revell, 1901).

98. For details, see Joseph Esherick, *The Origins of the Boxer Uprising* (Berkeley: Univ. of California Press, 1987).

99. *SF Call,* Sept. 5, 1900.

100. Diana Preston, *The Boxer Rebellion: The Dramatic Story of China's War on Foreigners That Shook the World in the Summer of 1900* (New York: Walker, 2000).

101. *SF Chronicle,* May 30 and July 9, 1900.

102. Eva J. Price, *China Journal 1889–1900: An American Missionary Family during the Boxer Rebellion* (New York: Charles Scribner's Sons, 1989), 222.

103. *SF Chronicle,* July 9, 1900.

104. "Discussing Indemnity," *CSYP,* June 20, 1900.

105. *SF Chronicle,* July 16, 1900.

106. Ibid.

107. *SF Chronicle,* July 17, 1900.

108. *SF Chronicle,* July 19, 1900.

109. "Discussing Restitution," *CSYP,* June 20, 1900; see also *SF Chronicle,* July 13, 1900.

110. *SF Chronicle,* July 28, 1900.

111. *SF Chronicle,* July 30, 1900.

CHAPTER SEVEN: Plague Goes Underground

Epigraph. J. H. White to Dr. Shields, Mar. 7, 1901, RPHS.

1. Joseph J. Kinyoun to Aunt and Uncle, June 29, 1901, p. 26, Joseph J. Kinyoun Papers, MS C 464, Modern Manuscripts Collection, National Library of Medicine, Bethesda, MD.

2. Wyman to J. H. White, Dec. 26, 1900, in *Annual Report of the Supervising Surgeon General for the Marine Hospital Service of the United States for the Fiscal Year 1901* (Washington, DC: GPO, 1901), 501.

3. For details, see Margaret Humphreys, *Yellow Fever and the South* (New Brunswick, NJ: Rutgers Univ. Press, 1992).

4. J. H. White to Wyman, Jan. 9, 1901, in *Annual Report of the Surgeon General 1901,* 502.

5. Kinyoun to Aunt and Uncle, p. 27.

6. J. H. White to Wyman, telegram, Jan. 10, 1901, in *Annual Report of the Surgeon General 1901,* 502.

7. The letter with Dr. Welch's suggestions is available in RPHS.

8. L. J. Gage to Flexner, Novy, and Barker, Jan. 19, 1901, in *Report of the Commission Appointed by the Secretary of the Treasury for the Investigation of Plague in San Francisco* (Washington, DC: GPO, 1901), 3.

9. S. Flexner, "The Bubonic Plague," *Johns Hopkins Hospital Bulletin* 7 (1896): 181–84; F. G. Novy, "The Bubonic Plague," *Popular Science Monthly* 57 (1900): 576–92.

10. *SF Bulletin,* Jan. 25, 1901.

11. Wyman to Flexner, Jan. 23, 1901, in *Report of the Commission,* 7.

12. Governor Gage to President McKinley, telegram, Jan. 29, 1901, in *Annual Report of the Surgeon General 1901,* 509.

13. *SF Chronicle,* Jan. 29 and Feb. 2, 1901.

14. *SF Call,* Feb. 1, 1901. See also *Pacific Medical Journal* 44 (Feb. 1901): 103–4.

15. *Report of the Commission,* 8–9.

16. Flexner to Wyman, Feb. 2, 1901, in *Annual Report of the Surgeon General 1901,* 511–12.

17. *Report of the Commission,* 8.

18. *OMT* 15 (Apr. 1901): 109–10.

19. *Report of the Commission,* 8–9.

20. *Report of the Commission,* 10.

21. Ibid., 12.

22. Glennan to Wyman, Oct. 21, 1902, RPHS.

23. Senator Perkins, memorandum, Mar. 1, 1901, RPHS.

24. *Pacific Medical Journal* 44 (Nov. 1901): 735.

25. Wyman to Victor C. Vaughan, Feb. 20, 1901, RPHS.

26. *Pacific Medical Journal* 44 (Nov. 1901): 737–78.

27. Ibid., 740.

28. Perkins and Bard to Gage, telegram, Feb. 20. 1901, RPHS.

29. Wyman to Kinyoun, telegram, Mar. 11, 1901, in *Annual Report of the Surgeon General 1901,* 537.

30. Confidential circular, Mar. 15, 1901, in *Annual Report of the Surgeon General 1901,* 538–39.

31. The *Journal of the American Medical Association* published the entire report; *JAMA* 36 (Apr. 20, 1901): 1131–32; 36 (Apr 27, 1901): 1197–1200.

32. Welch to Novy, Mar. 26, 1901, Frederick G. Novy Papers, Bentley Historical Library, University of Michigan.
33. Kinyoun to Aunt and Uncle, p. 32.
34. J. H. White to Wyman, Mar. 19, 1901, RPHS.
35. *Evening Bee,* Mar. 16, 1901.
36. Wyman to Welch, quoted in Flexner to Novy, Apr. 11, 1901, Novy Papers.
37. *OMT* 15 (Apr. 1901): 101–17.
38. "Special Article," *JAMA* 36 (Apr. 13, 1901): 1042–45.
39. *SF Chronicle,* Oct. 6, 1900.
40. *SF Chronicle,* June 19, 1900.
41. Kinyoun to Wyman, Oct. 10, 1900, RPHS.
42. Kinyoun to Senator Cockrell, Jan. 24, 1901, RPHS.
43. Kinyoun to Aunt and Uncle, p. 34.
44. *SF Chronicle,* Oct. 2, 1900.
45. *SF Call,* Oct. 5, 1900.
46. *SF Call,* Oct. 12, 1900.
47. *SF Bulletin,* Nov. 14, 1900.
48. *SF Bulletin,* Nov. 28, 1900.
49. *SF Chronicle,* Dec. 31, 1900.
50. *CSYP,* Jan. 9, 1901.
51. Kinyoun to Wyman, Dec. 29, 1900, RPHS.
52. A full transcript can be found in "The Plague Question Again," *Pacific Medical Journal* 44 (Feb. 1901): 102–4.
53. *SF Chronicle,* Jan. 9, 1901. See also "The Governor's Message and the Plague," *OMT* 15 (Feb. 1901): 57–60.
54. Kinyoun to Aunt and Uncle, p. 25.
55. *SF Call,* Feb. 1, 1901.
56. *SF Chronicle,* Jan. 25, 1901.
57. *Public Health Reports* 16 (Mar. 8, 1901): 443–44. See "California Legislation," *JAMA* 36 (Mar. 2, 1901): 450.
58. Kinyoun to Aunt and Uncle, p. 30.
59. Ibid., 32.
60. "The Plague Resolution of the State Medical Society," *OMT* 15 (June 1901): 215–18. See also *California Medical Society Transactions* 31 (1901): 374–78.
61. See Fee Y. Tam, *Cantonese Colloquial Expressions,* trans. Lo Tam Feiyan (Hong Kong, Chinese Univ. Pres, 2007).
62. "Wolf Doctor Finally Departed," *CSYP,* May 9, 1901.
63. Kinyoun to Aunt and Uncle, pp. 36–37.
64. Dr. Jos. J. Kinyoun to Preston H. Bailhache, [begun] Aug. 9, 1900, pp. 18–19, Kinyoun Papers.
65. Ibid., 69; Kinyoun to Aunt and Uncle, p. 20.
66. Kinyoun to Aunt and Uncle, p. 35.
67. Ibid.

68. Ibid., 36.
69. *SF Chronicle,* Jan. 31, 1901.
70. *SF Chronicle,* Jan. 9, 1901.
71. *SF Call,* Feb. 25 and Feb. 29, 1901.
72. *SF Call,* Feb. 3, 1901.
73. *SF Call,* Feb. 5, 1901.
74. *SF Chronicle,* Feb. 3, 1901.
75. *SF Chronicle,* Feb. 9, 1901.
76. *SF Chronicle,* Feb. 6 and 19, 1901; *Evening Bee,* Mar. 10, 1901.
77. *Public Health Reports* 16 (May 3, 1901): 933–34.
78. J. H. White to Wyman, Apr. 2, 1901, RPHS.
79. *SF Call,* Mar. 23, 1900.
80. Plan for the Eradication of Plague from Chinatown, San Francisco, Apr. 4, 1901, RPHS; see also *OMT* 15 (Aug. 1901): 287–302.
81. *SF Call,* Apr. 5, 1901.
82. "Proposal for Building Medical Wards in Chinatown," *CSYP,* Apr. 4, 1901.
83. *SF Call,* Apr. 10, 1901.
84. This measure was based on a letter written by Joseph H. White to the Secretary of the Six Companies, Chew Wo, Apr. 4, 1901, RPHS.
85. J. H. White to Wyman, Apr. 4, 1901, RPHS.
86. J. H. White to Wyman, Apr. 30, 1901, RPHS.
87. J. H. White to Wyman, May 10, 1901, RPHS.
88. *SF Chronicle,* May 28, 1901.
89. J. H. White wrote several letters of complaint to the state health board regarding Lawlor but received no response. See *Annual Report of the Surgeon General 1901,* 568–70.
90. J. H. White to Wyman, Apr. 10, 1901, RPHS.
91. Gage to Wyman, June 24, 1901, RPHS.
92. Blue, report, Sept. 16, 1901, RPHS.
93. "Destroy Chinatown," *JAMA* 37 (Nov. 30, 1901): 1469.
94. *SF Examiner,* Mar. 28, 1902.
95. *SF Chronicle,* Jan. 22, 1901.
96. Kinyoun to Senator Cockrell, Jan. 24, 1901, Kinyoun Papers.
97. Paul-Louis Simond, "La propagation de la peste," *Annales Institut Pasteur* 12 (1898): 625–87. For details, see Edward A. Crawford Jr., "Paul-Louis Simond and His Work on the Plague," *Perspectives in Biology and Medicine* 39 (Spring 1996): 446–59.
98. Wilfred H. Kellogg, "The Pathology and Bacteriology of Bubonic Plague," *California Medical Society Transactions* 31 (1901): 50–92.
99. Wyman to Treasury Department, Mar. 23, 1901, *Annual Report of the Surgeon General 1901,* 543–44.
100. The parties reached the agreement verbally on April 1; it was officially enacted Apr. 15, 1901. The new plague eradication plan was communicated by Joseph H. White to Wyman, Apr. 2, 1901, RPHS.
101. J. H. White to Wyman, Apr. 24, 1904, RPHS.

102. *SF Bulletin,* Apr. 23, 1901. See also *OMT* 15 (Aug. 1901): 287–302.
103. *OMT* 15 (Aug. 1901): 302.
104. J. H. White to Wyman, Apr. 24, 1901, RPHS.
105. J. H. White to Wyman, Apr. 30, 1901, RPHS.
106. J. H. White to Wyman, May 10, 1901, RPHS.
107. *SF Call,* Feb. 3, 1901.
108. White to Wyman, May 10, 1901.
109. J. H. White to Wyman, May 13, 1901, RPHS.
110. *Annual Report of the Surgeon General 1901,* 568.
111. J. H. White to Wyman, May 18, 1901, RPHS.
112. J. H. White to Wyman, May 29, 1901, RPHS, and *Annual Report of the Surgeon General 1901,* 557.
113. For biographical information on Rupert Blue, consult his private family letters in the Blue Family Collection at the University of South Carolina; see also Marilyn Chase, *The Barbary Plague: The Black Death in Victorian San Francisco* (New York: Random House, 2003), 35–43.
114. For details, see Benson Tong, *Unsubmissive Women: Chinese Prostitutes in Nineteenth-Century San Francisco* (Norman: Univ. of Oklahoma Press, 1994).
115. *Evening Bee,* July 11, 1901.
116. Blue to Wyman, July 11, 1901, RPHS.
117. *OMT* 15 (Aug. 1901): 268–70.
118. M. White to Blue, Sept. 27, 1901, RPHS.
119. *SF Call,* Sept. 6, 1901.
120. *OMT* 15 (Oct. 1901): 373–77.
121. M. White to Wyman, Sept. 12, 1901, RPHS.
122. Blue to Wyman, Sept. 25, 1901, RPHS.
123. Case of Chin Few, in Blue to Wyman, Nov. 4, 1901, RPHS; see also *CSYP,* Nov. 2, 1901.
124. M. White to Wyman, Sept. 24, 1901, RPHS.
125. Blue to Wyman, Oct. 18, 1901, RPHS.
126. *CSYP,* Aug. 16, 1901.
127. *OMT* 15 (Dec. 1901): 443–44.
128. M. White to Wyman, Dec. 26, 1901, RPHS.
129. Blue to Wyman, July 25, 1901, RPHS.

CHAPTER EIGHT: Rumors and Realities

Epigraph. J. M. Williamson, "An Address," *OMT* 15 (Dec. 1901): 423.
1. For details, see Judd Kahn, *Imperial San Francisco: Politics and Planning in an American City, 1897–1906* (Lincoln: Univ. of Nebraska Press, 1979), 29–56.
2. Blue to Wyman, Sept. 29, 1901, RPHS.
3. Walter Bean, *Boss Ruef's San Francisco: The Story of the Union Labor Party, Big Business, and the Graft Prosecution* (Berkeley: Univ. of California Press, 1952), 1–27.

4. Blue to Wyman, Oct. 18, 1901, RPHS.

5. Bean, *Boss Ruef's San Francisco,* 20–27. See also "Eugene Schmitz," in *San Francisco: A Brief Biographical Sketch of Some of the Most Prominent Men,* comp. Evarts I. Blake (San Francisco: Pacific, 1902), 30–31.

6. Bruce Bliven, "The Boodling Boss and the Musical Mayor," *American Heritage* 11 (Dec. 1959), available at www.americanheritage.com/content/boodling-boss-and-musical-mayor.

7. Blue to Wyman, Nov. 13, 1901, RPHS.

8. "Valedictory Address," in *Addresses of Mayor James D. Phelan* (San Francisco, 1901), 63–79.

9. *SF Call,* Jan. 8, 1902. See "Michael Casey," in Blake, *San Francisco,* 101.

10. *SF Call,* Jan. 9, 1902.

11. *SF Call,* Jan. 21, 1902.

12. Mark J. White to Wyman, Jan. 12, 1902, RPHS.

13. *SF Chronicle,* Jan. 30, 1902.

14. *SF Chronicle,* Mar. 26, 1902.

15. *SF Bulletin,* Mar. 26, 1902. See also M. White to Wyman, Mar. 26, 1902, RPHS.

16. *SF Call,* Mar. 26, 1901.

17. *SF Chronicle,* Mar. 26, 1902.

18. White to Wyman, telegram, Mar. 30, 1902, RPHS.

19. *SF Examiner,* Mar. 28, 1902.

20. Copy of the injunction, dated Mar. 26, 1902, in RPHS.

21. *SF Examiner,* May 28, 1902.

22. M. White to Wyman, July 26, 1902, RPHS.

23. M. White to Wyman, June 11, 1902, RPHS.

24. M. White to Williamson, Aug. 24, 1902, RPHS.

25. M. White to Wyman, Sept. 16, 1902, RPHS.

26. "The Board of Supervisors, the Mayor, and the Plague," *OMT* 16 (Aug. 1902).

27. M. White to Wyman, telegram, Oct. 17, 1902, RPHS. The local newspapers, however, were only reporting the reason for his trip as a speaking engagement at a Union Labor Party meeting.

28. M. White to Wyman, Jan. 24, 1902, RPHS.

29. M. White to Wyman, Mar. 14, 1902, RPHS. For details, see W. Köhler and M. Köhler, "Plague and Rats," *International Journal of Medical Microbiology* 293 (Nov 2003): 333–40.

30. M. White to Wyman, May 29, 1902, RPHS.

31. M. White to Wyman, May 30, 1902, RPHS.

32. In its biennial report from June 30, 1900 to June 30, 1902, the state board of health never mentioned the presence of plague in California; even San Francisco was often omitted from all reports, especially for the year 1900. *Seventeenth Biennial Report of the State Board of Health of California* (Sacramento, 1902).

33. M. White to Wyman, June 11, 1902, RPHS.

34. See Lewis L. Gould, *The Presidency of Theodore Roosevelt* (Lawrence: Univ. of Kansas Press, 1991). See also Nathan Miller, *Theodore Roosevelt: A Life* (New York: Morrow, 1992).

35. *SF Call*, May 24, 1902.

36. Details in H. Brett, *The Governors of California* (Georgetown, CA: Talisman, 1965), 268–71.

37. M. White to Wyman, Sept. 12, 1902, RPHS.

38. *JAMA* 39 (Sept. 6, 1902): 577.

39. Wyman to Glennan, Oct. 4, 1902, RPHS.

40. Wyman to Glennan, Oct. 17, 1902, RPHS.

41. Glennan to Wyman, Oct. 21, 1902, RPHS.

42. *CSJM* 1 (1903): 20–23; see also *SF Bulletin*, Oct. 31, 1902.

43. Glennan to Pardee, Jan 8, 1903, in *Annual Report of the Supervising Surgeon-General for the Marine Hospital Service of the United States for the Fiscal Year 1903* (Washington, DC: GPO, 1904), 234.

44. *SF Bulletin*, Nov. 1, 1902.

45. M. White to Wyman, Nov. 4, 1902, RPHS.

46. Glennan to Wyman, Nov 6. 1902, in *Annual Report of the Surgeon-General 1903*, 218.

47. Glennan to Wyman, Nov. 7, 1902, RPHS.

48. Glennan to Wyman, Nov. 12, 1902, RPHS.

49. Glennan to Wyman, Nov. 23, 1902, RPHS.

50. Glennan to Wyman, Dec. 8, 1902, RPHS.

51. *SF Call*, Dec. 12, 1902.

52. George H. Simmons to Wyman, Dec. 17, 1902, RPHS.

53. *Annual Report of the Surgeon-General 1903*, 233.

54. Interview with reporters from the *Evening Bee*. J. McClatchy to Wyman, Dec. 22, 1902, RPHS.

55. See Michael P. Rogin and John L. Shover, *Political Change in California: Critical Election and Social Movements, 1890–1966* (Westport, CT: Greenwood, 1970).

56. Laboratory Log Book, Marine Hospital Service, San Francisco, from Dec. 6, 1901 to Apr. 29, 1905, MS F114, Modern Manuscript Collection, National Library of Medicine, Bethesda, MD (hereafter MHS Lab Log Book), entry for Jan. 9, 1902.

57. M. White to Wyman, Jan. 12, 1902, RPHS.

58. "Debating Post-Mortem Findings," *CSYP*, Jan. 13, 1902.

59. M. White to Wyman, Jan. 21, 1902, RPHS.

60. Kinyoun to Novy, Jun. 4, 1902, Frederick G. Novy Papers, Bentley Historical Library, University of Michigan, Ann Arbor, MI.

61. M. White to Wyman, Jan. 31, 1902, RPHS.

62. "Time to Get Rid of a Bad Habit," *CSYP*, Mar. 3, 1902.

63. M. White to Wyman, May 22, 1902, RPHS.

64. MHS Lab Log Book, May 29, 1902.

65. Ibid., July 14, 1902.

66. "Second Rate Doctor Reports Plague," *CSYP,* July 16, 1902.

67. "Everything is going along very well with me." Wong to Novy, July 16, 1902, in Novy Papers.

68. M. White to Wyman, July 28, 1902, RPHS.

69. White praised Ryfkogel in a letter to the surgeon general; M. White to Wyman, Aug. 23, 1902, RPHS.

70. M. White to Wyman, Sept. 10, 1902, RPHS.

71. "Sanitary Conditions Outside Chinatown," *CSYP,* Jan. 24, 1902.

72. M. White to Wyman, Aug. 24, 1902, RPHS.

73. MHS Lab Log Book, Dec. 29, 1901.

74. M. White to Wyman, Apr. 22, 1902, RPHS.

75. "Rat Catching in Chinatown," *CSYP,* Sept. 30, 1902.

76. *SF Chronicle,* Nov. 25, 1902.

77. M. White to Wyman, Dec. 4, 1902, RPHS. White was transferred to Portland a few days later and replaced by Glennan.

78. Mark J. White, "Plague Eradication and Prevention," *JAMA* 49 (1907): 1364–66.

79. *SF Chronicle,* Feb. 7, 1901. A widely publicized visit to San Francisco of a leader from the Reform Party, Anthony L. Ahlo from Honolulu, was also strongly opposed. *SF Chronicle,* Sept. 7 and Sept. 12, 1901.

80. *SF Chronicle,* Nov. 8, 1901. For an overview, see Jean Pfaelzer, *Driven Out: The Forgotten War against Chinese Americans* (New York: Random House, 2007).

81. *SF Call,* Nov. 26, 1901.

82. *SF Chronicle,* Dec. 6, 1901. See also Ho Yow, "The Chinese Question," *Overland Monthly* 38 (1901): 250.

83. K. Scott Wong, "Cultural Defenders and Brokers: Chinese Responses to the Anti-Chinese Movement," in *Claiming America: Constructing Chinese American Identities during the Exclusion Era,* ed. K. Scott Wong and Sucheng Chan (Philadelphia, Temple Univ. Press, 1998), 3–40.

84. *SF Chronicle,* Sept. 15, 1901.

85. *SF Chronicle,* Sept. 17, 1901.

86. *SF Chronicle,* Feb. 15, 1902.

87. For further reading, see Andrew Gyory, *Closing the Gate: Race, Politics and the Chinese Exclusion Act* (Chapel Hill: Univ. of North Carolina Press, 1998).

88. *SF Chronicle* and *SF Call,* Nov. 23, 1901.

89. *SF Call,* Dec. 20, 1901.

90. *CSYP,* Dec. 28, 1901.

91. *SF Bulletin,* Mar. 19, 1902.

92. *SF Bulletin,* Mar. 20, 1902; *SF Chronicle,* Mar. 21, 1902.

93. *SF Chronicle,* Jun. 1, 1901.

94. In fact, any clever woodcarver easily could have cut a copy of the organization's original seal. *SF Chronicle,* June 6, 1902.

95. *SF Chronicle,* Mar. 20, 1902.

96. For other phrases, see Lo Tam Fee-yin, *Cantonese Colloquial Expressions* (Hong Kong: Chinese University Press, 2007).

97. *SF Chronicle,* Mar. 20, 1902.

98. "Promoting Good Deeds," *CSYP,* Oct. 21, 1902.

99. Harriet Quimby, "The Chinese Hospital," *SF Chronicle,* Aug. 24, 1902.

100. For details, see Guenter B. Risse, "Translating Western Modernity: The First Chinese Hospital in America," *BHM* 85 (Fall 2011): 413–47.

101. After 1910, Alberts became the "dean of 20th-century charlatans" with his electric diagnostic and therapeutic contraptions. See James H. Harvey, *The Medical Messiahs: A Social History of Health Quackery in the Twentieth Century* (Princeton, NJ: Princeton Univ. Press, 1967), 137–42.

102. Quimby, "The Chinese Hospital."

103. *SF Chronicle,* Mar. 21, 1902.

104. *SF Chronicle,* Apr. 12, 1902.

105. *SF Chronicle,* Apr. 23, 1902.

106. See Delber L. McKee, *Chinese Exclusion versus the Open Door Policy: Clashes over China Policy in the Roosevelt Era, 1900–1906* (Detroit: Wayne State Univ. Press, 1977).

107. "Relocation," *CSYP,* July 29, 1902.

108. *SF News Letter,* Aug. 30, 1902; reprinted by the Virtual Museum of San Francisco www.sfmuseum.org.

109. *SF Chronicle,* July 25, 1902.

110. "Closing Brothels," *CSYP,* July 30, 1902.

111. *SF Chronicle,* Aug. 20, 1902.

112. M. White to Wyman, Oct. 3, 1902, RPHS.

113. M. White to Wyman, Oct. 7, 1902, RPHS.

114. M. White to Wyman, Oct. 6, 1902, RPHS.

115. M. White to Wyman, Oct. 11, 1902, RPHS.

116. *SF Chronicle,* Jan. 2, 1903.

117. *SF Chronicle,* Aug. 14, 1902.

118. *SF Chronicle,* Nov. 16, 1902.

119. *SF Chronicle,* Nov. 23, 1902.

CHAPTER NINE: National Threat

Epigraph. Annual Report of the Surgeon-General of the Public Health and Marine-Hospital Service of the United States for the Fiscal Year 1903 (Washington, DC: GPO, 1904), 238.

1. Glennan to Pardee, Jan. 8, 1903, RPHS.

2. Glennan to Wyman, Jan. 11, 1903, RPHS.

3. For details, see Richard J. Orsi, *Sunset Limited: The Southern Pacific Railroad and the Development of the American West, 1850–1930* (Berkeley: Univ. of California Press, 2005).

4. For more information, see Robert E. L. Knight, *Industrial Relations in the San Francisco Bay Area, 1900–1918* (Berkeley: Univ. of California Press, 1960).

5. *SF Chronicle,* Jan. 1, 1903.

6. *SF Chronicle,* Jan. 6, 1903.

7. For background information, see Albro Martin, *James J. Hill and the Opening of the Northwest* (New York: Oxford Univ. Press, 1976).

8. Richard C. Berner, *Seattle, 1900–1920: From Boomtown, Urban Turbulence to Restoration* (Seattle: Charles Press, 1991).

9. For details, see William F. Deverell, *Railroad Crossing: Californians and the Railroad, 1850–1910* (Berkeley: Univ. of California Press, 1994).

10. *SF Examiner,* Dec. 1, 1902.

11. Glennan to Wyman, Jan. 14, 1903, RPHS.

12. *SF Chronicle,* Jan. 20, 1903.

13. *SF Bulletin,* Jan. 20, 1903.

14. *SF Chronicle,* Jan. 20, 1903.

15. See *Plague Conference Held in Washington, DC, Jan. 19, 1903* (Washington, DC: GPO, 1903), also reprinted as "The Plague Conference," *American Medicine* 5 (Jan. 31, 1903): n.p., RPHS.

16. Glennan to Wyman, Jan. 30, 1903, RPHS.

17. For more information, see Donovan L. Hofsommer, *The Southern Pacific, 1901–1985* (College Station: Texas A&M Univ. Press, 1986).

18. *SF Chronicle,* Jan. 20, 1903.

19. Memorandum submitted by Assistant Surgeon Currie, in *Annual Report of the Surgeon-General 1903,* 235–37.

20. Ibid., 238. The final plague conference resolutions are also available at www.ncbi.nlm.nih.gov/pmc/articles.

21. Wyman to Glennan, telegram, Jan. 28, 1903, RPHS.

22. *SF Call,* Jan. 24, 1902.

23. *SF Chronicle,* Feb. 24, 1903.

24. *SF Call,* Feb. 24, 1903.

25. "The Conference of the State Boards of Health," *OMT* 17 (Feb. 1903): 65–68.

26. For details, see John F. Stover, *American Railroads* (Chicago: Univ. of Chicago Press, 1961).

27. Glennan to Wyman, Feb. 12, 1903, RPHS.

28. "Railway Company Blamed," *CSYP,* Jan. 21, 1903.

29. *SF Call,* Apr. 28, 1903.

30. *SF Call,* Apr. 29, 1903.

31. *Transactions of the First Annual Conference of State and Territorial Officers with the U.S. Public Health Service* (Washington DC: USGPO, 1903), 13–14.

32. Ibid., 33.

33. *SF Chronicle,* Jan. 7, 1903.

34. Glennan to Wyman, telegram, Jan. 6, 1903, RPHS. See also "Gage's Departure," *CSYP,* Jan. 7, 1903.

35. H. Brett Meherdy and B. F. Gilbert, "George C. Pardee," in *The Governors of California* (Georgetown, CA: Talisman, 1965), 273–87.

36. Glennan to Wyman, Jan. 11, 1903, RPHS.

37. Glennan to Wyman, Jan. 9, 1903, RPHS.

38. *SF Call,* Jan. 20, 1903.

39. *SF Bulletin,* Jan. 20, 1903.

40. Wyman to Glennan, telegram, Jan. 21, 1903, RPHS.

41. Wyman to Glennan, telegram, Jan. 28, 1903, RPHS.

42. Glennan to Wyman, Jan. 22, 1903, RPHS.

43. Glennan to Wyman, Jan. 30, 1903, RPHS. For more information, see Edward F. Staniford, "Governor in the Middle: The Administration of George C. Pardee, Governor of California" (Ph.D. diss., University of California, Berkeley, 1955).

44. Glennan to Wyman, telegram, Feb. 5 and 6, 1903, RPHS.

45. *SF Call,* Jan. 14, 1903.

46. *SF Chronicle,* Jan. 16, 1903.

47. Glennan to Wyman, Jan. 30, 1903.

48. "The Plague Conference," *American Medicine* 5 (Jan. 31, 1903): n.p., RPHS. The journal only mentioned that Schmitz personally assured Wyman that "all opposition to the view that plague exists is now at an end."

49. *SF Chronicle,* Feb. 19, 1903.

50. "The Plague and the Conference of State Boards," *OMT* 17 (Jan. 1903): 27–28.

51. *SF Chronicle,* Jan. 27, 1903.

52. Glennan to Wyman, Feb. 4, 1903, RPHS.

53. Wyman to Glennan, telegram, Jan. 28, 1903, RPHS.

54. Glennan to Wyman, Feb. 12, 1903, RPHS.

55. Resolution, Mercantile Joint Committee, Feb. 2, 1903, RPHS.

56. Glennan to Wyman, Feb. 12, 1903, RPHS.

57. Wyman to Symmes, Feb. 22, 1903, reprinted in *Pacific Medical Journal* 46 (Feb. 1903): 164–65.

58. The ban was lifted after negotiations between the surgeon general and Eduardo Liceaga, president of Mexico's health board. *SF Chronicle,* Mar. 17 and 24, 1903.

59. Emery to Wyman, June 13, 1903, RPHS.

60. Ibid.

61. *SF Chronicle,* Mar. 27, 1903; "New Rule," *CSYP,* Mar. 27, 1903.

62. *SF Chronicle,* Mar. 19, 1903; "Mexican Government," *CSYP,* Mar. 19, 1903.

63. *SF Chronicle,* Apr. 1, 1903.

64. Glennan to Wyman, May 26, 1903, RPHS.

65. *Plague Conference,*12.

66. D. Currie, "The Common Rat," *CSJM* 1 (Nov. 1903): 359–63.

67. Laboratory Log Book, Marine Hospital Service, San Francisco, from Dec. 6, 1901 to Apr. 29, 1905, MS F114, Modern Manuscript Collection, National Library of Medicine, Bethesda, MD (hereafter MHS Lab Log Book), Sept. 8, 1903.

68. Blue to Wyman, Sept. 12, 1903.
69. *San Francisco Municipal Reports for the Fiscal Year 1902–1903* (San Francisco, 1904); "Annual Report of the SF Board of Health," *OMT* 17 (Sept. 1903): 325–30.
70. *SF Chronicle,* Jan. 3, 1903.
71. "Attention to Sanitary Issues," *CSYP,* Jan. 7, 1903.
72. "Business and Moving Chinatown," *CSYP,* Jan. 21, 1903.
73. *SF Chronicle,* Dec. 2, 1902.
74. *SF Examiner,* Dec. 2, 1902.
75. *SF Chronicle,* Jan. 27, 1903.
76. "Debate about New Streets," *CSYP,* Feb. 5, 1903.
77. Ibid.
78. "Discussion of Demolitions," *CSYP,* Feb. 24, 1903.
79. *SF Bulletin,* Feb. 24, 1903.
80. *Pacific Medical Journal* 46 (Feb 1903): 155–6.
81. *CSJM* 24 (Mar 1903): 50.
82. "Talk of Recreation," *CSYP,* Apr. 2, 1903.
83. *SF Call,* Mar. 10, 1903.
84. "Removal of Chinatown," *CSYP,* Apr. 10, 1903.
85. *SF Call,* Mar. 10, 1903.
86. *SF Chronicle,* Mar. 21, 1903.
87. *SF Chronicle,* Apr. 1, 1903.
88. *SF Call,* Apr. 2, 1903.
89. *SF Chronicle,* Apr. 2, 1903.
90. *SF Chronicle,* Apr. 4, 1903.
91. *SF Chronicle,* Apr. 3, 1903.
92. *SF Chronicle,* Apr. 11, 1903.
93. "Removal," *CSYP,* Apr. 4, 1903.
94. *SF Chronicle,* Apr. 14, 1903.
95. *SF Call,* Apr. 7, 1903.
96. *SF Chronicle,* Apr. 8, 1903. See also "Discussion of Removal," *CSYP,* Apr. 9, 1903.
97. *SF Chronicle,* Apr. 11, 1903.
98. MHS Lab Log Book, June 29, 1903.
99. "Cleaning Chinatown," *CSYP,* Feb. 19, 1903.
100. William M. Bunker, "Only Chinatown's Removal Will Bring City Security," *Merchants Association Review,* Aug. 1903, n.p., RPHS.
101. Walter Wyman, The Health of the Nation," *New York State Journal of Medicine* 5 (Mar. 1905): 1–11.
102. *SF Chronicle,* May 15, 1903.
103. "Removal," *CSYP,* May 15, 1903.
104. "Need for Demolition," *CSYP,* June 13, 1903.
105. MHS Lab Log Book, Aug. 18, 1903.
106. Currie's experiences were summarized in D. Currie, "Review of the Plague Situation in San Francisco," *Public Health Reports* 18 (Jan. 30, 1903): 121–24.

107. *Annual Report of the Surgeon-General 1903*, 236.
108. Glennan to Wyman, Jan. 30, 1903, RPHS.
109. "Plague Prevention," *CSYP,* Mar. 27, 1903.
110. *SF Chronicle,* Feb. 27, 1903.
111. Glennan to Wyman, Jan. 24, 1903, RPHS.
112. Plan for the Eradication of Plague in Chinatown, Feb. 9, 1903, RPHS.
113. *SF Chronicle,* Feb. 25, 1903.
114. MHS Lab Log Book, Apr. 13, 1903.
115. Glennan to Wyman, Feb. 12, 1903, RPHS.
116. *SF Chronicle,* Feb. 19, 1903.
117. Plan for the Eradication of Plague.
118. Report, Cleaning Campaign, May 1903. RPHS.
119. *Annual Report of the Surgeon-General 1903,* 247; Yee Fun to Glennan, Feb. 7, 1903, RPHS.
120. *SF Chronicle,* Feb. 21, 1903.
121. "Conceding Mutual Assistance," *CSYP,* Feb. 21, 1903.
122. *SF Chronicle,* Mar. 27, 1903.
123. Blue to Wyman, May 4, 1903, RPHS.
124. Blue to Wyman, report, Mar 1903, RPHS.
125. N.K. Foster, "Remarks by Delegates," *Transactions of the Second Annual Conference of State and Territorial Health Officers* (Washington, DC: GPO, 1904), 37–43.
126. San Francisco Chinatown Residential Inspection Records, MSS 130, Holt-Atherton Department of Special Collections, Univ. of the Pacific Library, Stockton, CA.
127. Ibid., folder 1: Jackson and Dupont.
128. For details, see Wendy R. Jorae, *The Children of Chinatown: Growing Up Chinese American in San Francisco, 1850–1920* (Chapel Hill: Univ. of North Carolina Press, 2009).
129. Cheap fares—$15 in gold for a ticket—and the desire to reach the homeland before the Chinese New Year were cited as ostensible reasons for the exodus. *SF Call,* Dec. 3, 1903.
130. Foster, "Remarks," 13.
131. See William C. Hassler, "The Methods Employed in the Eradicating of an Infectious Disease in the Chinese Quarter of San Francisco," *CSJM* 3 (Dec. 1905): 390.
132. *SF Chronicle,* Aug. 7, 1904.
133. The Tung Wah advertisements in the *Chinese Western Daily* offer an interesting window into personnel changes at the institution.
134. "San Francisco's Chinatown is beginning to lose its conservativeness. It is rarely now that the Oriental doctor in his dignified silks sweeps into the home of a rich Chinese . . . he has been pushed aside by the white woman practitioners"; "White Women Doctors," *SF Chronicle,* Aug. 7, 1904.

135. Physicians speculated that Pietro Spadafora's death was due to his frequent use of kindling wood obtained from a crumbling Chinatown building allegedly infected with plague.

CHAPTER TEN: Sanitarians Claim Victory

1. *SF Call,* Oct. 13, 1903.
2. *SF Chronicle,* Dec. 1, 1903.
3. *SF Chronicle,* Sept. 22, 1905.
4. Blue to Wyman, Nov. 5, 1903, RPHS.
5. Blue to Wyman, Jan. 6, 1904, RPHS.
6. *SF Chronicle,* Jan. 8, 1904.
7. "San Francisco Board of Health," *CSJM* 2 (Feb. 1904): 39–40.
8. Blue to Wyman, Jan. 12, 1904, RPHS.
9. "San Francisco's New Board of Health," *Pacific Medical Journal* 47 (Feb 1904): 93–97.
10. *SF Chronicle,* Jan. 9, 1904.
11. Laboratory Log Book, Marine Hospital Service, San Francisco, from Dec. 6, 1901 to Apr. 29, 1905, MS F114, Modern Manuscript Collection, National Library of Medicine, Bethesda, MD (hereafter MHS Lab Log Book), Jan. 9, 1904.
12. *SF Bulletin,* Jan. 12, 1904.
13. *SF Chronicle,* Jan. 16, 1904.
14. Blue to Wyman, Jan. 12, 1904, RPHS.
15. *SF Bulletin,* Jan. 19, 1904.
16. *SF Chronicle,* Jan. 17, 1904.
17. *SF Bulletin,* Jan. 24, 1904.
18. MHS Lab Log Book, Jan. 18, 1904.
19. "Funding for Sanitary Campaign," *CSYP,* Jan. 19, 1904.
20. *SF Chronicle,* Jan. 19, 1904.
21. Blue to Wyman, Jan. 20, 1904, RPHS.
22. *SF Chronicle,* Jan. 21, 1904.
23. *SF Chronicle,* Jan. 26, 1904.
24. Blue to Wyman, Feb. 2, 1904, RPHS.
25. "The Board of Health of San Francisco," *OMT* 18 (Feb. 1904): 61–62.
26. Blue to Wyman, Feb. 10, 1904, RPHS.
27. Blue to Wyman, May 26, 1904, RPHS.
28. *SF Chronicle,* Apr. 23, 1905.
29. MHS Lab Log Book, June 3, 1904.
30. Blue to Wyman, July 12, 1904, RPHS.
31. *SF Chronicle,* July 1, 1904.
32. *SF Call,* Dec. 1, 1904.
33. *SF Chronicle,* Mar. 9, 1905.

34. *Evening Bee* (Sacramento), Jan. 7, 1904.
35. Blue to Wyman, Jan. 12, 1904, RPHS.
36. Blue to Wyman, Feb. 6, 1904, RPHS.
37. MHS Lab Log Book, Feb. 6, 1904.
38. Minutes of meeting, Feb. 6, 1904, RPHS. See also *Annual Report of the Surgeon-General of the Public Health and Marine-Hospital Service of the United States for the Fiscal Year 1904* (Washington, DC: USGPO, 1904), 226.
39. Blue to Wyman, Apr. 4, 1904, RPHS.
40. Blue to Wyman, Apr. 23, 1904, RPHS.
41. N. K. Foster, "The Sanitary Needs of the State," *CSJM* 3 (Mar. 1905): 88–89.
42. *SF Chronicle,* May 1, 1904.
43. Minutes of the meeting, Apr. 30, 1904, RPHS. An announcement can be found in *CSJM* 2 (June 1904): 201.
44. Blue to Wyman, May 7, 1904, RPHS.
45. *Transactions of the Second Annual Conference of State and Territorial Health Officers* (Washington, DC: GPO, 1904), 14.
46. *Annual Report of the Surgeon-General 1904.*
47. *Second Annual Conference,* 19–20.
48. *San Francisco Municipal Reports for the Fiscal Year 1903–1904* (San Francisco, 1905), 314–15.
49. W. Wyman, "The Health of Nations," *New York State Journal of Medicine* 5 (Mar. 1905): 7–10.
50. *Annual Report of the Surgeon-General of the Public Health and Marine-Hospital Service of the United States for the Fiscal Year 1905* (Washington, DC: GPO, 1905), 162.
51. *Transactions of the Third Annual Conference of State and Territorial Health Officers* (Washington, DC: GPO, 1906), 33–34.
52. *Annual Report of the Surgeon-General 1905*, 213–214.
53. N. K. Foster, "The Hopes, Disappointment, and Successes of the State Board of Health," *CSJM* 3 (Oct. 1905): 318–20.
54. F. Tidswell, "The Epidemiology of Plague: Note on the Fleas or Rats," *British Medical Journal* 2 (1903): 1491. For a historical perspective and modern view, see C. A. Hubbard, *Fleas of Western North America: Their Relation to Public Health* (New York: Hafner, 1968), 3–27.
55. Blue to Wyman, Apr. 1903, RPHS.
56. Blue to Wyman, June 8, 1903, RPHS.
57. Glennan to Wyman, May 4, 1903, RPHS.
58. Blue to Wyman, Aug. 24, 1903, RPHS.
59. Blue to Wyman, Sept. 16, 1903. Reports were also published in the *Evening Bee,* Sept. 16, 1903.
60. Blue to Wyman, Jan. 6, 1904, RPHS.
61. Blue to Wyman, May 26, 1904, RPHS.

62. D. H. Currie, "The Common Rat," *CSMJ* 1 (Nov. 1903): 359–63.

63. In early January 1904, Hassler's crew consisted of eleven men and a foreman, each earning $3.00 per day, with two additional teamsters with wagons ($6.00), a plumber ($4.00), and his assistant ($2.50); *SF Chronicle,* Jan. 27, 1904.

64. "Demolitions," *CSYP,* Sept. 18, 1903. Discarded lumber and defective plumbing features attracted hordes of thieves, arriving from all parts of the city for the spoils.

65. See letter of Jan. 20, 1904, in *Annual Report of the Surgeon-General 1904,* 571–73.

66. N. K. Foster in *Second Annual Conference,* 34–43.

67. Currie wrote about a series of experiments performed in the service's laboratory. Although the initial mortality fluctuated between 50 and 90 percent, surviving rats were nearly all immune to the "virus." Currie, "Common Rat," 361.

68. Eventually, Italians would be racially characterized as the "Chinese from Europe" because of their olive complexion. E. Lee, "American Gatekeeping: Race and Immigration Law in the Twentieth Century," in *Not Just Black and White: Historical and Contemporary Perspectives on Immigration, Race, and Ethnicity in the United States,* ed. N. Foner and G. H. Fredrickson (New York: Russell Sage Foundation, 2004), 124–25.

69. Blue to Wyman, Feb. 19, 1904, RPHS.

70. Blue to Wyman, Feb. 23, 1904, RPHS.

71. Blue to Wyman, May 7, 1904, RPHS.

72. Blue to Wyman, Apr. 4, 1904, RPHS.

73. *SF Municipal Reports 1903–1904,* 315.

74. Blue to Wyman, Aug. 18, 1904, RPHS.

75. Blue to Wyman, July 21, 1904, RPHS.

76. *Evening Bee,* June 18, 1904.

77. Blue to Wyman, Oct. 8, 1904, RPHS. The broth needed to be fresh and protected from light, a fact that prompted the state health board to manufacture its own supply of poison, to be provided free of charge to any citizen requesting it.

78. MHS Lab Log Book, Aug. 22, 1904.

79. *SF Chronicle,* Mar. 12, 1905.

80. MHS Lab Log Book, Feb. 1, 1905.

81. *SF Chronicle,* Mar. 24, 1905.

82. See W. Glen Liston, "Plague, Rats, and Fleas," *Proceedings of Bombay Natural History Society* 16 (Nov. 24, 1904); W. J. Simpson, *A Treatise of Plague* (Cambridge: University Press, 1905), 214–16.

83. Frank M. Todd, *Eradicating Plague from San Francisco* (San Francisco: C. A. Murdock, 1909).

84. "This man gave us faithful and efficient service for a period of three years"; MHS Lab Log Book, Mar. 1, 1905.

85. Ibid., Apr. 1, 1905.

86. *SF Examiner,* Apr. 21, 1905.

87. *SF Bulletin,* Apr. 23, 1905.

88. *SF Chronicle,* Sept. 19. 1905.

89. *SF Chronicle,* Sept. 25, 1905.

90. 58 Cong. Rec. 38–47 (1905) (General Deficiency Bill, H.R., Appropriations, Feb. 18).

91. Glennan in *Annual Report of the Surgeon-General of the Public Health and Marine-Hospital Service of the United States for the Fiscal Year 1903* (Washington, DC: GPO, 1904), 237.

92. Foster in *Second Annual Conference,* 19–20.

93. The *Chinese Western Daily* closely followed the status of a California bill that would have forced all Chinese deaths to be subjected to postmortem examinations. The paper speculated that such legislation would create a shortage of pathologists and require more local funding. See *CSYP,* Jan. 28, 1904.

94. *CSYP,* Feb. 8, 1904.

95. Wells to Wyman, May 31, 1904, RPHS.

96. Ibid.

97. MHS Lab Log Book, Apr. 30, 1904.

98. *Annual Report of the Surgeon General 1904,* 569–71.

99. Blue to Wyman, July 21, 1904, RPHS.

100. "Meeting of Doctors," *CSYP,* July 13, 1904.

101. *SF Chronicle,* Sept. 6, 1904.

102. *SF Chronicle,* Oct. 19, 1902.

103. For details, see Diana L. Ahmad, *The Opium Debate and the Chinese Exclusion Laws in the Nineteenth-Century American West* (Reno: Univ. of Nevada Press, 2007).

104. Advertisements, *CSYP,* May 16, 1902; Aug. 16, 1902; Nov. 16, 1903.

105. "The Harm of Opium," *CSYP,* Sept. 2, 1901. See David T. Courtwright, *Dark Paradise: Opiate Addiction in America before 1940* (Cambridge, MA: Harvard Univ. Press, 1982), 62–86.

106. *SF Chronicle,* July 20, 1905.

107. For details, see Raymond W. Rast, "Tourist Town: Tourism and the Emergence of Modern San Francisco, 1869–1915" (Ph.D. diss., Univ. of Washington, 2006).

108. *SF Chronicle,* Sept. 24, 1904.

109. *SF Chronicle,* June 26, 1905.

110. *SF Chronicle,* Nov. 6, 1904.

111. Anna Naruta, "Relocation," Chinese Historical Society of America, "Earthquake: The Chinese Story," exhibition pamphlet, Apr. 3–Sept. 16, 2006, n.p.

112. Although the San Francisco Health Board originally accepted the offer, residents in the vicinity vehemently protested against the project, forcing the city to reconsider its decision. A story of the San Francisco Pesthouse or Isolation Hospital is currently in preparation by Guenter B. Risse.

113. *SF Chronicle,* Nov. 18, 1904.

114. *SF Call,* Nov. 18, 1904.

115. *SF Chronicle,* Nov. 19, 1904.

116. W. Wyman, "Sanitation and Progress," *JAMA* 36 (Mar. 9, 1901): 611.

117. Blue to Wyman, Nov. 30, 1904, RPHS.

118. *SF Chronicle,* Feb. 7, 1905.

119. *Merchant's Association Review,* Feb. 1905, n.p. The *SF Real Estate Circular* of the same month also carried a similar article on the "new Chinatown."

120. *SF Chronicle,* Apr. 17, 1905.

121. *SF Examiner,* Mar. 24, 1905.

122. *SF Chronicle,* Mar. 5, 1905.

123. *SF Chronicle,* June 26, 1905; July 1, 1905.

124. Yon Chen, *Chinese San Francisco, 1850–1943: A Trans Pacific Community* (Stanford: Stanford Univ. Press, 2000), 148–61.

125. *SF Chronicle,* Aug. 29, 1904. See also Hassler, "Eradicating an Infectious Disease," 391.

126. *Evening Bee,* Sept. 16, 1903.

127. Blue to Wyman, Apr. 12, 1904, RPHS.

128. Blue to Wyman, May 6, 1904, RPHS.

129. MHS Lab Log Book, June 21, 1904.

130. Blue to Wyman, Aug. 18, 1904, RPHS.

131. Blue to Wyman, Nov. 19, 1904, RPHS.

132. Wyman to Blue, Jan. 5, 1905, RPHS.

133. Blue to Wyman, Jan. 17, 1905, RPHS.

134. Glennan to Currie, Feb. 4, 1905, RPHS.

135. Wilfred Kellogg, "Present Status of Plague, with Historical Review," *American Journal of Public Health* 10 (Nov. 1920): 835–44.

136. See W. B. Wherry, "Plague among the Ground Squirrels of California," *Journal of Infectious Diseases* 5 (1908): 485–506. Reports about the subsequent campaign against infected squirrels led by Assistant Surgeon W. Rucker was published in *JAMA* 53 (1909): 1995–99.

137. *Public Health Reports* 25 (Feb. 18, 1910): 250. See also G. W. McCoy, "The Evidence of Plague Infection among Ground Squirrels," *Public Health Reports* 25 (Jan. 14, 1910): 27–33. For a comprehensive view of contemporary knowledge on plague, see William J. Simpson, *A Treatise of Plague* (Cambridge: Cambridge Univ. Press, 1905).

138. L. Kartman, "Historical and Oecological Observations on Plague in the United States," *Tropical and Geographical Medicine* 22 (Sept. 1970): 227–75.

139. J. Z. Adjemian et al., "Initiation and Spread of Traveling Waves of Plague, *Yersinia pestis,* in the Western United States, " *American Journal of Tropical Medicine and Hygiene* 76 (2007): 365–75.

140. See San Francisco seasonal rainfall figures from Jan Hull, "Climate of San Francisco," Golden Gate Weather Services, http://ggweather.com/sf/. The Bay Area hosts many flea species and potential vectors of plague; recent studies have implicated at least twenty with varied degrees of infectivity based on the amount of blockage of their alimentary canal caused by the multiplying plague bacteria. A break-

down of San Francisco rat fleas in 1910 disclosed that 52 percent belonged to the *Ceratophyllus fasciatus* species; only 32 percent belonged to the Oriental flea, *Xenopsilla cheopis,* the preferred vector. See also J. C. Z. Adjemian et al., "Analysis of Genetic Algorithm for Rule-Set Production (GARP) Modeling Approach for Predicting Distributions of Fleas Implicated as Vectors of Plague, *Yersinia pestis,* in California," *Journal of Medical Entomology* 43 (2006): 93–103. This opinion was expressed by Kenneth Gage, an entomologist and plague expert from the Centers for Disease Control, Fort Collins, CO.

Epilogue

Epigraph. P. N. Beringer, "The Destruction of San Francisco," *Overland Monthly* 47 (Apr. 1906): 398.

1. James R. Wilson, comp., *San Francisco's Horror of Earthquake and Fire* (N.p.: Memorial Publishing Co., 1906), 48, 215.

2. Ibid., 233. See also Edward F. Dolan Jr., *Disaster 1906: The San Francisco Earthquake and Fire* (New York: J. Messner, 1959), 97–99.

3. Wilson, *San Francisco's Horror,* 412.

4. For details, see Erica Y. Z. Pan, *The Impact of the 1906 Earthquake on San Francisco's Chinatown* (New York: P. Lang, 1995), 33–60.

5. California's Chinese mortuary records list individuals dying of burns in the days following the fire. See Chinese Mortuary Records for the City and County of San Francisco, vol. 4 (June 8, 1905–Feb. 26, 1918), National Archives, Pacific Region, San Bruno, CA.

6. *SF Chronicle,* Apr. 29, 1906.

7. The best recent account is Philip L. Fradkin, *The Great Earthquake and Firestorms of 1900: How San Francisco Nearly Destroyed Itself* (Berkeley: Univ. of California Press, 2005).

8. *Pacific Medical Journal* 49 (May–June 1906): 271.

9. *SF Examiner,* Apr. 31, 1906.

10. A. Naruta, "Relocation," in *Earthquake: The Chinatown Story,* exhibition, Chinese Historical Society of America, San Francisco, Apr. 3–Sept. 16, 2006.

11. *New York Times,* Apr. 21, 1906.

12. *CSYP,* Apr. 29, 1906.

13. "For Chinatown Old Site," *SF Chronicle,* May 11, 1906.

14. *CSYP,* Mar 20, 1908.

15. Arthur Inkersley, "What San Francisco Has to Start With," *Overland Monthly* 47 (June–July 1906): 446–96.

16. Erica Pan argues this point persuasively; see *Impact of the 1906 Earthquake,* 117–25.

17. Susie Lan Cassell, introduction to *The Chinese In America: A History from Gold Mountain to the New Millennium,* ed. S. L. Cassell (Walnut Creek, CA: AltaMira,

2002), 10. In a stunning development, Chinatown's major benevolent associations rebuilt their facilities without sponsoring joss houses. Even some of the popular religious ceremonies were banished, marking a break from tradition.

18. Anthony W. Lee, *Picturing Chinatown: Art and Orientalism in San Francisco* (Berkeley: Univ. of California Press, 2001), 151; see also Yon Chen, *Chinese San Francisco, 1850–1943: A Trans-Pacific Community* (Stanford: Stanford Univ. Press, 2000), 8.

19. Details in G. B. Risse, " A Long Pull, A Strong Pull, and All Together: San Francisco and Bubonic Plague, 1907–1908," *BHM* 66 (1992): 260–86.

20. R. Blue, "The Underlying Principles of Anti-Plague Measures," in *Eradicating Plague from San Francisco,* ed. Frank M. Todd (San Francisco: C. A. Murdock, 1908), 215–24.

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